# LLNL Livermore Site Second Quarter 2015 Self-Monitoring Report

This quarterly report presents the second quarter 2015 self-monitoring data for the ground water and soil vapor treatment facilities at the Lawrence Livermore National Laboratory (LLNL) Livermore Site. The volumes of ground water and soil vapor treated, and volatile organic compound (VOC) mass removed during the second quarter of 2015 are presented in Tables 1 and 2, respectively. An historical summary of VOC volume and mass removed are presented in Tables 3 and 4, respectively.

Attachment A presents results of ground water treatment facility and extraction well (ground water and soil vapor) VOC, and chromium analyses (Tables A-1 through A-4). During the second quarter of 2015, all effluent sample analytical results were within acceptable discharge limits.

Self-monitoring reports for all treatment facilities are presented in Attachment B. Monthly volumes of ground water extracted are shown in Attachment B; however, instantaneous flow rates are not shown for wells that are now only used for sampling and are not continuously pumped. The monthly volume shown for these wells is the quantity of water evacuated for sampling purposes.

A map showing Livermore Site treatment areas and treatment facility locations, and ground water elevation contour maps showing hydraulic capture zones for hydrostratigraphic units (HSUs) 1B, 2, 3A, 3B, 4, and 5, are presented in Attachment C. The contour maps for the individual HSUs are based on data collected during the second quarter of 2015.

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Table 1. Volumes of ground water and soil vapor extracted and treated at the Livermore Site, April through June 2015.

Treatment Area <sup>a</sup>	Month	Volume of ground water extracted (Kgal) <sup>b</sup>	Volume of vapor extracted (Kcf) <sup>l</sup>
TFA	April	8,384	-
	May	9,228	-
	June	9,901	2
TFB	April	2,540	-
	May	2,529	-
	June	2,751	-
TFC	April	2,852	-
	May	2,589	-
	June	3,171	-
TFD	April	5,301	1,345
	May	4,112	996
	June	4,396	981
TFE	April	2,451	1,067
	May	2,225	989
	June	2,473	982
TFG	April	334	-
	May	336	-
	June	288	-
TFH	April	540	2,647
	May	742	2,611
	June	769	2,924
TOTAL		67,912	14,544

<sup>&</sup>lt;sup>a</sup> Totals include ground water and soil vapor extracted from the following facilities:

TFA area: TFA, TFA-E

TFB area: TFB

TFC area: TFC, TFC-E, TFC-SE

TFD area: TFD, TFD-E, TFD-HPD, TFD-S, TFD-SE, TFD-SS, TFD-W, VTFD-ETCS

TFE area: TFE-E, TFE-HS, TFE-NW, TFE-SE, TFE-SW, TFE-W, VTFE-ELM, VTFE-HS

TFG area: TFG-1, TFG-N

TFH area: TF406, TF406-NW, TF518-N, TF518-PZ, TF5475-1, TF5475-2, TF5475-3, VTF406-HS, VTF511, VTF518-PZ, VTF5475

TFF started operation in February 1993 for fuel hydrocarbon remediation. In August 1995, the regulatory agencies agreed that the vadose zone remediation was complete, and in October 1996 a No Further Action status was granted for the ground water.

<sup>&</sup>lt;sup>b</sup> Totals are derived from individual extraction wells shown in Attachment B.

<sup>&</sup>lt;sup>c</sup> Rounded number.

Kcf = Thousands of cubic feet.

**Kgal = Thousands of gallons.** 

Table 2. VOC mass removed at the Livermore Site, April through June 2015.

Treatment Area <sup>a</sup>	VOC mass removed from ground water (kg)	VOC mass removed from soil vapor (kg)	Total VOC mass removed (kg) <sup>b</sup>
TFA	0.8	0.004	0.8
TFB	0.5	-	0.5
TFC	1.0	-	1.0
TFD	3.8	0.6	4.4
TFE	1.9	0.4	2.3
TFG	0.08	-	0.1
TFH	0.4	4.0	4.4
TOTALb	8.5	5.0	13.5

Table 3. Historical summary of volumes of water and soil vapor removed at the Livermore Site through June 2015.

Treatment Area <sup>a</sup>	Volume of ground water extracted (Mgal)	Volume of vapor extracted (Mcf)	
TFA	2,235	0	
TFB	542	-	
TFC	608	-	
TFD	1,243	148	
TFE	450	220	
TFG	99	-	
TFH	191	316	
TOTAL <sup>b</sup>	5,368	684	

Table 4. Historical summary of VOC mass removed from water and soil vapor at the Livermore Site through June 2015.

Treatment Area <sup>a</sup>	VOC mass removed from ground water (kg)	VOC mass removed from soil vapor (kg)	Total VOC mass removed (kg) <sup>b</sup>
TFA	220	0	220
TFB	87	-	87
TFC	117	-	117
TFD	912	102	1,014
TFE	242	159	401
TFG	13	-	13
TFH	44	1,301	1,345
TOTAL <sup>b</sup>	1,635	1,562	3,197

<sup>&</sup>lt;sup>a</sup> Refer to Table 1 footnote for facilities in each treatment facility area.

Abbreviations for Tables 2, 3 and 4:

kg = Kilograms.

Mcf = Millions of cubic feet.

Mgal = Millions of gallons.

**VOC = Volatile organic compound.** 

<sup>&</sup>lt;sup>b</sup> Rounded number.

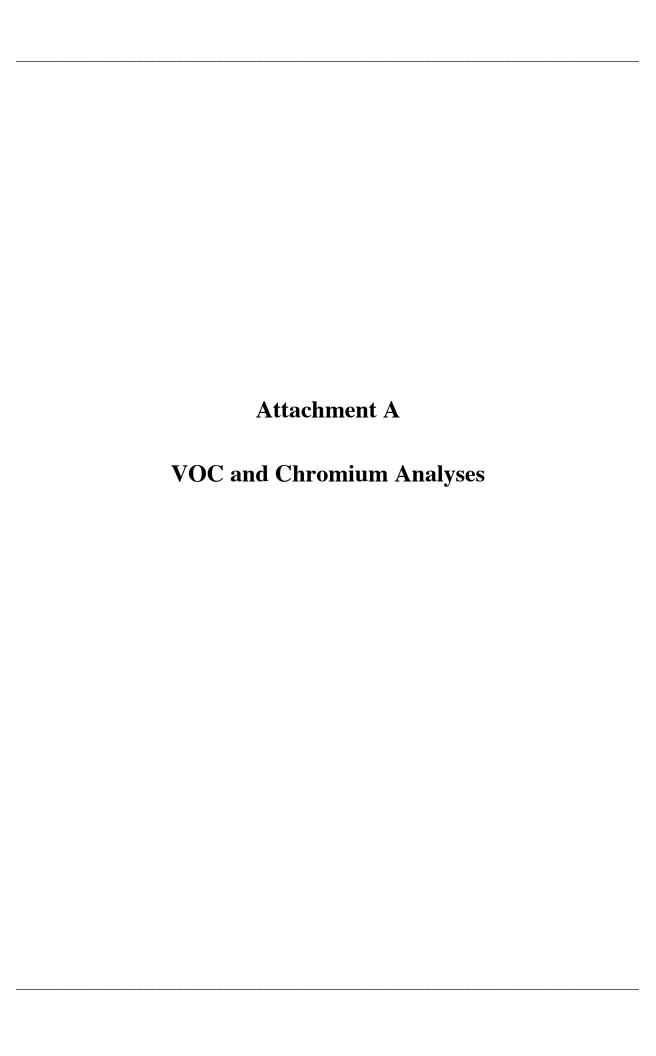


Table A-1. VOC analyses of influent and effluent samples by treatment facility.

Sample	Date	Analytic											
Station	Sampled	Method	CTET	CFORM	1,1-DCA	1,2-DCA		1,2-DCE	Freon 113	PCE	1,1,1-TCA	TCE	Freon 11
			<-	-	-	-	ug/L (ppb)	-	-	-	-	-	->
TFA													
TFA-I001	09-APR-15		<0.5	0.91	0.57	<0.5	0.98	<1	<0.5	4.9	<0.5	0.52	<0.5
TFA-I001	01-MAY-15		<0.5	0.96	0.59	<0.5	1	<1	<0.5	4.9	<0.5	0.59	<0.5
TFA-I001	02-JUN-15	E624MOD	<0.5	0.97	0.56	<0.5	1	<1	<0.5	5.2	<0.5	0.53	<0.5
TFA-E001	09-APR-15	E624MOD	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
TFA-E001	01-MAY-15	E624MOD	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	<1	<0.5	< 0.5	< 0.5	< 0.5	<0.5
TFA-E001	02-JUN-15	E624MOD	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
TFA-E <sup>a</sup>													
W-254	20-APR-15	E624MOD	<0.5	<0.5	0.79	<0.5	0.64	4.1	<0.5	72	<0.5	2	<0.5
TFB													
TFB-I002	02-APR-15	E624MOD	0.59	2.4	< 0.5	< 0.5	1.3	<1	3	1.2	< 0.5	12	<0.5
TFB-I002	04-MAY-15		0.63	2.6	<0.5	< 0.5	1.4	<1	3.6	1.3	< 0.5	13	<0.5
TFB-I002	01-JUN-15	E624MOD	0.63	2.6	<0.5	<0.5	1.4	<1	3.5	1.3	<0.5	14	<0.5
TFB-E002	02-APR-15	E624MOD	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
TFB-E002	04-MAY-15		< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	<1	<0.5	< 0.5	< 0.5	< 0.5	<0.5
TFB-E002	01-JUN-15	E624MOD	<0.5	< 0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
TFC													
TFC-I003	02-APR-15	E624MOD	< 0.5	1.1	< 0.5	< 0.5	0.79	<1	9.2	3.4	< 0.5	11	<0.5
TFC-I003	04-MAY-15	E624MOD	< 0.5	1.1	< 0.5	< 0.5	0.81	<1	9.3	3.5	< 0.5	11	<0.5
TFC-I003	01-JUN-15	E624MOD	<0.5	1.1	<0.5	<0.5	0.79	<1	9.2	3.7	<0.5	12	<0.5
TFC-E003	02-APR-15	E624MOD	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
TFC-E003	04-MAY-15	E624MOD	< 0.5	< 0.5	< 0.5	< 0.5	<0.5	<1	<0.5	< 0.5	< 0.5	< 0.5	<0.5
TFC-E003	01-JUN-15	E624MOD	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
TFC-E													
MTU1-I	09-APR-15	E624MOD	<0.5	11	< 0.5	< 0.5	0.8	<1	13	0.91	<0.5	8.7	3.6
MTU1-I	13-MAY-15	E624MOD	<0.5	11	< 0.5	< 0.5	0.78	<1	13	0.84	<0.5	8.3	3.8
MTU1-I	17-JUN-15	E624MOD	<0.5	12	<0.5	<0.5	0.87	<1	13	0.84	<0.5	8.9	3.9
MTU1-E	09-APR-15	E624MOD	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
MTU1-E	13-MAY-15	E624MOD	< 0.5	< 0.5	< 0.5	< 0.5	<0.5	<1	<0.5	<0.5	<0.5	< 0.5	<0.5
MTU1-E	17-JUN-15	E624MOD	<0.5	< 0.5	<0.5	<0.5	<0.5	<1	< 0.5	<0.5	<0.5	<0.5	<0.5

Table A-1. VOC analyses of influent and effluent samples by treatment facility.

Sample Station	Date Sampled	Analytic Method	CTET	CFORM	1 1 DCA	12004	1,1-DCE	1 2 DCE	Eroon 112	PCE	1,1,1-TCA	TCE	Freon 11
Station	Sampled	Wethod	<-	-	1,1-DCA -	1,2-DCA -	ug/L (ppb)	1,2-DCE -	-	-	1,1,1-1CA -	-	->
TFC-SE													
PTU1-I	02-APR-15	E624MOD	< 0.5	7.8	< 0.5	< 0.5	3.8	<1	8.4	< 0.5	< 0.5	21	0.7
PTU1-I	04-MAY-15	E624MOD	<0.5	5.6	< 0.5	< 0.5	1.7	<1	18	0.79	< 0.5	15	1
PTU1-I	01-JUN-15	E624MOD	<0.5	5.7	<0.5	<0.5	1.6	<1	16	0.81	<0.5	14	1
PTU1-E	02-APR-15	E624MOD	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
PTU1-E	04-MAY-15	E624MOD	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	<1	< 0.5	< 0.5	< 0.5	< 0.5	<0.5
PTU1-E	01-JUN-15	E624MOD	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
TFD <sup>b</sup>													
TFD-I004	08-APR-15	E624MOD	2.1	2.2	<0.5	<0.5	0.51	<1	<0.5	0.55	<0.5	41	13
TFD-E004	08-APR-15	E624MOD	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
TFD-E													
PTU8-I	08-APR-15	E624MOD	3.2	1.1	< 0.5	0.6	5	<1	<0.5	4	<0.5	69	0.7
PTU8-I	01-MAY-15	E624MOD	4.1	1.4	< 0.5	< 0.5	5.1	<1	0.55	4.6	<0.5	71	<0.5
PTU8-I	02-JUN-15	E624MOD	3.4	1.1	<0.5	0.59	5.4	<1	<0.5	4.6	<0.5	70	0.68
PTU8-E	08-APR-15		<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
PTU8-E	01-MAY-15	E624MOD	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	<1	<0.5	< 0.5	<0.5	< 0.5	<0.5
PTU8-E	02-JUN-15	E624MOD	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
TFD-HPD													
PTU10-I	09-APR-15	E624MOD	1.5	< 0.5	< 0.5	< 0.5	< 0.5	<1	<0.5	< 0.5	<0.5	34	<0.5
PTU10-I	07-MAY-15		1.5	<0.5	<0.5	< 0.5	<0.5	<1	<0.5	< 0.5	<0.5	34	<0.5
PTU10-I	16-JUN-15	E624MOD	1.3	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	35	<0.5
PTU10-E	09-APR-15	E624MOD	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
PTU10-E	07-MAY-15	E624MOD	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	<1	< 0.5	< 0.5	<0.5	< 0.5	<0.5
PTU10-E	16-JUN-15	E624MOD	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
TFD-S													
PTU2-I	08-APR-15	E624MOD	0.72	2.2	< 0.5	< 0.5	3.4	<1	1.1	5.2	< 0.5	47	<0.5
PTU2-I	08-MAY-15	E624MOD	0.72	2.1	< 0.5	< 0.5	3.5	<1	1.1	5.2	<0.5	46	<0.5
PTU2-I	12-JUN-15	E624MOD	0.7	2.4	<0.5	<0.5	3.8	<1	1.1	5.3	<0.5	49	<0.5
PTU2-E	08-APR-15	E624MOD	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
PTU2-E	08-MAY-15		<0.5	< 0.5	< 0.5	< 0.5	<0.5	<1	<0.5	< 0.5	<0.5	< 0.5	<0.5
PTU2-E	12-JUN-15	E624MOD	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5

Table A-1. VOC analyses of influent and effluent samples by treatment facility.

Sample	Date	Analytic		050511			4 4 5 6 5	40.00	- 110		=0.		
Station	Sampled	Method	CTET <-	CFORM -	1,1-DCA -	1,2-DCA -	1,1-DCE ug/L (ppb)	1,2-DCE -	Freon 113	PCE -	1,1,1-TCA -	TCE -	Freon 11 ->
TFD-SE													
PTU11-I	01-APR-15	E624MOD	< 0.5	2.5	0.62	1.1	8.3	<1	0.55	22	< 0.5	70	<0.5
PTU11-I	04-MAY-15	E624MOD	< 0.5	2.5	0.66	1.1	10	<1	0.54	25	< 0.5	75	<0.5
PTU11-I	02-JUN-15	E624MOD	0.51	2.9	0.68	1.2	9.9	<1	0.7	25	<0.5	75	<0.5
PTU11-E	01-APR-15	E624MOD	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
PTU11-E	04-MAY-15	E624MOD	< 0.5	< 0.5	< 0.5	< 0.5	<0.5	<1	< 0.5	< 0.5	< 0.5	< 0.5	<0.5
PTU11-E	02-JUN-15	E624MOD	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
TFD-SS													
PTU12-I	01-APR-15	E624MOD	1.8	2.4	0.57	2	11	<1	< 0.5	17	< 0.5	110	3.9
PTU12-I	21-MAY-15	E624MOD	1.8	2.1	< 0.5	1.2	7.3	<1	< 0.5	12	< 0.5	87	7.3
PTU12-I	05-JUN-15	E624MOD	1.7	2.2	<0.5	1.2	7.4	<1	<0.5	12	<0.5	87	8.3
PTU12-E	01-APR-15	E624MOD	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
PTU12-E	21-MAY-15	E624MOD	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	<1	< 0.5	< 0.5	< 0.5	< 0.5	<0.5
PTU12-E	05-JUN-15	E624MOD	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
TFD-W													
PTU6-I	08-APR-15	E624MOD	< 0.5	6.2	< 0.5	< 0.5	<0.5	<1	< 0.5	< 0.5	< 0.5	3.9	33
PTU6-I	07-MAY-15	E624MOD	< 0.5	5.7	< 0.5	< 0.5	<0.5	<1	< 0.5	< 0.5	< 0.5	3.5	31
PTU6-I	16-JUN-15	E624MOD	<0.5	5.2	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	3.3	28
PTU6-E	08-APR-15	E624MOD	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
PTU6-E	07-MAY-15	E624MOD	< 0.5	< 0.5	< 0.5	< 0.5	<0.5	<1	< 0.5	< 0.5	< 0.5	< 0.5	<0.5
PTU6-E	16-JUN-15	E624MOD	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
TFE-E													
PTU3-I	02-APR-15	E624MOD	0.57	4	< 0.5	< 0.5	8	<1	6.2	9	< 0.5	74	<0.5
PTU3-I	04-MAY-15	E624MOD	0.63	4.7	< 0.5	0.5	8.4	<1	6.6	9.3	< 0.5	81	< 0.5
PTU3-I	02-JUN-15	E624MOD	0.66	4.8	<0.5	0.55	8.1	<1	6.4	9.8	<0.5	85	<0.5
PTU3-E	02-APR-15	E624MOD	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
PTU3-E	04-MAY-15	E624MOD	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	<1	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
PTU3-E	02-JUN-15	E624MOD	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
TFE-HS													
GTU07-I	01-APR-15	E624MOD	3.4	2	<0.5	< 0.5	5.3	2.1	2.1	5.7	<0.5	220	<0.5
GTU07-I	04-MAY-15	E624MOD	3.3	1.9	< 0.5	< 0.5	5.3	2	2	5.5	<0.5	230	<0.5
GTU07-I	02-JUN-15	E624MOD	3.9	2	<0.5	<0.5	5.6	2.3	2.2	6.3	<0.5	220	<0.5

Table A-1. VOC analyses of influent and effluent samples by treatment facility.

Sample Station	Date Sampled	Analytic Method	CTET	CFORM	1,1-DCA	1,2-DCA	1,1-DCE	1,2-DCE	Freon 113	PCE	1,1,1-TCA	TCE	Freon 11
			<-	-	-	-	ug/L (ppb)	-	-	-	-	-	->
TFE-HS (cont.)													
GTU07-E	01-APR-15	E624MOD	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	<1	< 0.5	< 0.5	< 0.5	< 0.5	<0.5
GTU07-E	04-MAY-15	E624MOD	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	<1	< 0.5	< 0.5	< 0.5	< 0.5	<0.5
GTU07-E	02-JUN-15	E624MOD	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
TFE-NW													
PTU9-I	08-APR-15		< 0.5	1.3	<0.5	< 0.5	<0.5	<1	1.2	< 0.5	< 0.5	12	<0.5
PTU9-I	08-MAY-15	E624MOD	< 0.5	1.1	<0.5	< 0.5	< 0.5	<1	1	< 0.5	< 0.5	11	<0.5
PTU9-I	05-JUN-15	E624MOD	<0.5	1.2	<0.5	<0.5	<0.5	<1	1	<0.5	<0.5	11	<0.5
PTU9-E	08-APR-15		<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
PTU9-E	08-MAY-15		< 0.5	<0.5	<0.5	< 0.5	<0.5	<1	<0.5	< 0.5	< 0.5	<0.5	<0.5
PTU9-E	05-JUN-15	E624MOD	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
TFE-SE													
W-359	01-APR-15	E624MOD	2.3	2.2	< 0.5	< 0.5	12	<1	5.7	6.8	< 0.5	150	<0.5
MTU04-I	04-MAY-15	E624MOD	2.4	2.8	< 0.5	< 0.5	13	<1	6.1	7.1	< 0.5	150	< 0.5
MTU04-I	02-JUN-15	E624MOD	2.4	2.9	<0.5	<0.5	12	<1	5.9	7.4	<0.5	150	<0.5
MTU04-E	01-APR-15	E624MOD	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
MTU04-E	04-MAY-15	E624MOD	< 0.5	< 0.5	<0.5	< 0.5	< 0.5	<1	< 0.5	< 0.5	< 0.5	<0.5	<0.5
MTU04-E	02-JUN-15	E624MOD	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
TFE-SW													
MTU03-I	08-APR-15	E624MOD	1.3	1.8	<0.5	< 0.5	0.7	<1	0.59	1.3	< 0.5	31	<0.5
MTU03-I	07-MAY-15	E624MOD	1.2	1.7	<0.5	< 0.5	0.64	<1	0.57	1.1	< 0.5	28	<0.5
MTU03-I	16-JUN-15	E624MOD	1.2	1.7	<0.5	<0.5	8.0	<1	0.54	1.2	<0.5	32	<0.5
MTU03-E	08-APR-15	E624MOD	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
MTU03-E	07-MAY-15	E624MOD	< 0.5	< 0.5	<0.5	< 0.5	< 0.5	<1	< 0.5	< 0.5	< 0.5	< 0.5	<0.5
MTU03-E	16-JUN-15	E624MOD	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
TFE-W													
MTU05-I	08-APR-15		< 0.5	0.89	<0.5	< 0.5	1.4	<1	6.8	5.8	< 0.5	24	<0.5
MTU05-I	13-MAY-15		< 0.5	0.9	< 0.5	< 0.5	1.4	<1	7.4	5.6	<0.5	23	<0.5
MTU05-I	17-JUN-15	E624MOD	<0.5	0.93	<0.5	<0.5	1.4	<1	7.3	5.6	<0.5	23	<0.5
MTU05-E	08-APR-15	E624MOD	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	0.76	<0.5
MTU05-E	13-MAY-15	E624MOD	<0.5	< 0.5	< 0.5	< 0.5	< 0.5	<1	<0.5	<0.5	< 0.5	1.1	<0.5
MTU05-E	17-JUN-15	E624MOD	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5

Table A-1. VOC analyses of influent and effluent samples by treatment facility.

Sample	Date	Analytic											
Station	Sampled	Method	CTET	CFORM	1,1-DCA	1,2-DCA		1,2-DCE	Freon 113	PCE	1,1,1-TCA	TCE	Freon 11
			<-	-	-	-	ug/L (ppb)	-	-	-	-	-	->
TFG-1													
W-1111	15-APR-15	E624MOD	3.2	9.4	<0.5	<0.5	0.79	<1	<0.5	1	<0.5	4.1	<0.5
GTU01-I	15-MAY-15		3.8	9.5	< 0.5	< 0.5	0.76	<1	<0.5	1.2	<0.5	4.6	<0.5
GTU01-I	05-JUN-15	E624MOD	3.7	9.1	<0.5	<0.5	0.77	<1	<0.5	0.99	<0.5	4	<0.5
GTU01-E	15-APR-15	E624MOD	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
GTU01-E	15-MAY-15	E624MOD	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	<1	< 0.5	< 0.5	< 0.5	< 0.5	<0.5
GTU01-E	05-JUN-15	E624MOD	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
TFG-N													
MTU02-I	15-APR-15	E624MOD	< 0.5	1.4	< 0.5	< 0.5	1.5	<1	1.3	18	< 0.5	4.8	<0.5
MTU02-I	15-MAY-15	E624MOD	< 0.5	1.2	< 0.5	< 0.5	1.4	<1	1.2	17	< 0.5	4.6	<0.5
MTU02-I	12-JUN-15	E624MOD	<0.5	1.4	<0.5	<0.5	1.4	<1	1.3	17	<0.5	5	<0.5
MTU02-E	15-APR-15	E624MOD	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
MTU02-E	15-MAY-15	E624MOD	< 0.5	<0.5	< 0.5	< 0.5	< 0.5	<1	< 0.5	< 0.5	< 0.5	< 0.5	<0.5
MTU02-E	12-JUN-15	E624MOD	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
TF406													
PTU5-I	08-APR-15	E624MOD	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	<1	< 0.5	< 0.5	< 0.5	3.5	<0.5
PTU5-I	07-MAY-15	E624MOD	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	<1	< 0.5	< 0.5	< 0.5	3.4	<0.5
PTU5-I	16-JUN-15	E624MOD	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	3.4	<0.5
PTU5-E	08-APR-15	E624MOD	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
PTU5-E	07-MAY-15	E624MOD	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	<1	<0.5	< 0.5	<0.5	< 0.5	<0.5
PTU5-E	16-JUN-15	E624MOD	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
TF406-NW													
W-1801	15-APR-15		< 0.5	1.7	< 0.5	< 0.5	< 0.5	<1	3.5	0.82	<0.5	15	<0.5
GTU03-I	15-MAY-15		< 0.5	1.6	< 0.5	< 0.5	< 0.5	<1	3.3	0.93	<0.5	19	<0.5
GTU03-I	05-JUN-15	E624MOD	<0.5	2	<0.5	<0.5	<0.5	<1	2.9	0.85	<0.5	19	<0.5
GTU03-E	15-APR-15		<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
GTU03-E	15-MAY-15		<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
GTU03-E	05-JUN-15	E624MOD	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
TF518-N <sup>c</sup>													
W-1410	20-APR-15	E624MOD	1.9	2	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	12	<0.5

Table A-1. VOC analyses of influent and effluent samples by treatment facility.

Sample Station	Date Sampled	Analytic Method	CTET	CFORM	1,1-DCA	1,2-DCA	1,1-DCE	-	Freon 113	PCE	1,1,1-TCA	TCE	Freon 11
			<u> </u>	-	-	-	ug/L (ppb)	-	-	-	-	-	->
 TF5475-1 <sup>d</sup>													_
W-1302-2	22-APR-15	E624MOD	2.5	40	1.5	5.1	29	2.2	9.1	58	<0.5	420	<0.5
TF5475-2													
GTU09-I	01-APR-15	E624MOD	1.7	17	< 0.5	2.5	15	<1	4.3	30	< 0.5	230	< 0.5
GTU09-I	21-MAY-15	E624MOD	1.5	14	< 0.5	2.2	13	<1	3.4	25	< 0.5	190	< 0.5
GTU09-I	05-JUN-15	E624MOD	1.3	14	<0.5	2.1	13	<1	3.2	24	<0.5	190	<0.5
GTU09-E	01-APR-15	E624MOD	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
GTU09-E	21-MAY-15	E624MOD	< 0.5	<0.5	< 0.5	< 0.5	< 0.5	<1	<0.5	< 0.5	< 0.5	< 0.5	< 0.5
GTU09-E	05-JUN-15	E624MOD	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
 TF5475-3 <sup>e</sup>													

Notes on following page.

### Table A-1. VOC analyses of influent and effluent samples by treatment facility.

#### Notes:

CTET = Carbon tetrachloride

CFORM = Chloroform

1,1-DCA = 1,1-Dichloroethane

1,2-DCA = 1,2-Dichloroethane

1,1-DCE = 1,1-Dichloroethylene

1,2-DCE = 1,2-Dichloroethylene

Freon 113 = Trichlorotrifluoroethane

PCE = Tetrachloroethylene

1,1,1-TCA = 1,1,1-Trichloroethane

TCE = Trichloroethene

Freon 11 = Trichlorofluoromethane

VOC = Volatile organic compound

Numbers in **BOLD** print indicate positive values above the detection limit.

<sup>&</sup>lt;sup>a</sup> TFA-E did not operate during the reporting period due to the single extraction well W-254 being dry due to dewatering in the area.

b TFD did not operate during the months of May and June due to upgrades being performed as part of the Remediation Evaluation (REVAL) process.

 $<sup>^{\</sup>rm c}\,$  TF518-N did not operate during the reporting period due to mixed waste disposition issues.

<sup>&</sup>lt;sup>d</sup> TF5475-1 did not operate during this reporting period due to mixed waste disposition issues.

<sup>&</sup>lt;sup>e</sup> TF5475-3 did not operate during this reporting period due to mixed waste disposition issues.

Table A-2. VOC analyses of samples from treatment facility extraction wells.

 Extraction	Date	Analytic											
Well	Sampled	Method	CTET	CFORM	1,1-DCA	1,2-DCA	1,1-DCE	1,2-DCE	Freon 113	PCE	1,1,1-TCA	TCE	Freon 11
			<b>&lt;-</b>	-	-	•	ug/L (ppb)	-	-	-	-	-	->
TFA													
W-109	14-APR-15	E624MOD	< 0.5	<0.5	< 0.5	< 0.5	< 0.5	<1	0.53	0.9	<0.5	< 0.5	< 0.5
W-262	14-APR-15		< 0.5	<0.5	<0.5	< 0.5	< 0.5	<1	<0.5	< 0.5	<0.5	< 0.5	< 0.5
W-404	14-APR-15		< 0.5	<0.5	0.59	< 0.5	0.91	<1	<0.5	3.9	<0.5	< 0.5	< 0.5
W-408	14-APR-15		< 0.5	<0.5	<0.5	< 0.5	< 0.5	<1	<0.5	< 0.5	<0.5	< 0.5	<0.5
W-415	14-APR-15		< 0.5	1.8	0.55	< 0.5	1.2	<1	< 0.5	9.7	<0.5	0.95	< 0.5
W-457	14-APR-15	E624MOD	< 0.5	<0.5	< 0.5	< 0.5	0.56	<1	< 0.5	4.6	<0.5	< 0.5	< 0.5
W-518	14-APR-15	E624MOD	< 0.5	<0.5	5.4	< 0.5	3	<1	< 0.5	4.4	<0.5	< 0.5	< 0.5
W-522	14-APR-15	E624MOD	< 0.5	< 0.5	1.3	< 0.5	0.9	<1	< 0.5	2.6	< 0.5	< 0.5	< 0.5
W-605	14-APR-15	E624MOD	< 0.5	< 0.5	0.66	< 0.5	0.8	<1	< 0.5	11	< 0.5	0.53	< 0.5
W-614	14-APR-15	E624MOD	< 0.5	0.51	< 0.5	< 0.5	< 0.5	<1	< 0.5	4.2	< 0.5	< 0.5	< 0.5
W-712	14-APR-15	E624MOD	2.7	3	1	< 0.5	3.6	<1	< 0.5	2	< 0.5	3.1	< 0.5
W-714	14-APR-15	E624MOD	< 0.5	< 0.5	<0.5	< 0.5	< 0.5	<1	< 0.5	5.6	< 0.5	< 0.5	< 0.5
W-903	14-APR-15	E624MOD	< 0.5	< 0.5	0.64	< 0.5	0.65	<1	< 0.5	4	< 0.5	< 0.5	< 0.5
W-904	14-APR-15	E624MOD	< 0.5	< 0.5	<0.5	< 0.5	0.64	<1	<0.5	4.1	< 0.5	< 0.5	< 0.5
W-1001	14-APR-15	E624MOD	< 0.5	< 0.5	<0.5	< 0.5	< 0.5	<1	<0.5	< 0.5	< 0.5	< 0.5	< 0.5
W-1004	14-APR-15	E624MOD	< 0.5	< 0.5	<0.5	< 0.5	< 0.5	<1	<0.5	2.1	< 0.5	< 0.5	< 0.5
W-1009	14-APR-15	E624MOD	0.96	4.4	0.59	<0.5	2.7	<1	<0.5	9.6	<0.5	1.6	<0.5
TFA-E													
W-254	20-APR-15	E624MOD	<0.5	<0.5	0.79	<0.5	0.64	4.1	<0.5	72	<0.5	2	<0.5
TFB													
W-357	02-APR-15	E624MOD	1.5	3.1	<0.5	< 0.5	1.2	<1	3.2	1.1	< 0.5	28	< 0.5
W-610	02-APR-15	E624MOD	< 0.5	< 0.5	<0.5	< 0.5	0.68	<1	0.77	0.54	< 0.5	1.1	< 0.5
W-620	02-APR-15	E624MOD	< 0.5	< 0.5	<0.5	< 0.5	< 0.5	<1	<0.5	0.55	< 0.5	1.6	< 0.5
W-621	02-APR-15	E624MOD	< 0.5	< 0.5	<0.5	< 0.5	< 0.5	<1	<0.5	< 0.5	< 0.5	1.1	< 0.5
W-655	02-APR-15	E624MOD	< 0.5	< 0.5	<0.5	< 0.5	< 0.5	<1	5.6	< 0.5	< 0.5	0.62	< 0.5
W-704	02-APR-15	E624MOD	0.59	4	<0.5	< 0.5	2.2	<1	6	2.3	< 0.5	17	< 0.5
W-1423	02-APR-15	E624MOD	0.76	4.6	< 0.5	< 0.5	3.1	<1	3	1.7	< 0.5	8.2	< 0.5
W-2501	02-APR-15		<0.5	< 0.5	< 0.5	< 0.5	< 0.5	<1	1.1	< 0.5	< 0.5	4	< 0.5
W-2502	02-APR-15	E624MOD	0.54	2.3	<0.5	<0.5	1.4	<1	<0.5	<0.5	<0.5	2.2	<0.5
TFC													
W-701	02-APR-15	E624MOD	< 0.5	2.1	< 0.5	< 0.5	1.6	<1	21	1.9	< 0.5	17	< 0.5
W-1104	02-APR-15	E624MOD	< 0.5	0.65	< 0.5	< 0.5	< 0.5	<1	2.3	4.6	<0.5	8.3	< 0.5
W-1116	11-JUN-15	E624MOD	< 0.5	1.2	< 0.5	< 0.5	0.51	<1	5.2	3	< 0.5	3.1	< 0.5

Table A-2. VOC analyses of samples from treatment facility extraction wells.

Extraction Well	Date Sampled	Analytic Method	CTET	CFORM	1.1-DCA	1.2-DCA	1.1-DCE	1.2-DCE	Freon 113	PCE	1,1,1-TCA	TCE	Freon 11
-			<-	-	-	-	ug/L (ppb)	-	-	-	-	-	->
TFC-E													
W-368	09-APR-15	E624MOD	< 0.5	4	< 0.5	< 0.5	<0.5	<1	17	2.8	< 0.5	12	2.6
W-413	09-APR-15	E624MOD	<0.5	13	<0.5	<0.5	0.93	<1	12	<0.5	<0.5	7.8	4
TFC-SE													
W-1213	25-JUN-15	E624MOD	< 0.5	7.6	< 0.5	< 0.5	2.2	<1	7.6	< 0.5	< 0.5	13	0.7
W-2201	25-JUN-15		<0.5	5.8	<0.5	<0.5	1.4	<1	17	0.86	<0.5	14	1
TFD													
W-351	08-APR-15	E624MOD	26	4.6	< 0.5	0.82	7	<1	4.6	6	< 0.5	460	1.3
W-653	08-APR-15		17	5.3	< 0.5	< 0.5	0.64	<1	2.3	0.67	< 0.5	420	< 0.5
W-2011	08-APR-15	E624MOD	0.82	0.75	< 0.5	< 0.5	< 0.5	<1	<0.5	< 0.5	< 0.5	18	< 0.5
W-2101	08-APR-15	E624MOD	3.1	1.6	< 0.5	< 0.5	< 0.5	<1	< 0.5	< 0.5	< 0.5	110	< 0.5
W-2102	08-APR-15	E624MOD	12	3.8	<0.5	< 0.5	<0.5	<1	1.4	< 0.5	< 0.5	320	1.1
W-1206	08-APR-15	E624MOD	0.66	2.8	<0.5	< 0.5	<0.5	<1	<0.5	< 0.5	< 0.5	11	< 0.5
W-1208	08-APR-15	E624MOD	1.8	1.8	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	35	22
TFD-E													
W-2006	08-APR-15	E624MOD	1.1	2.1	3.3	10	95	1.6	<0.5	92	< 0.5	540	< 0.5
W-1301	08-APR-15	E624MOD	7.1	2.9	1.8	6.4	56	<1	0.72	40	< 0.5	270	< 0.5
W-1303	08-APR-15	E624MOD	3.2	2.2	<0.5	1.1	3.8	<1	<0.5	4.4	< 0.5	95	5.4
W-1306	08-APR-15	E624MOD	1.7	1.2	< 0.5	< 0.5	< 0.5	<1	<0.5	2	< 0.5	45	< 0.5
W-1307	08-APR-15	E624MOD	2.6	0.62	< 0.5	< 0.5	< 0.5	<1	<0.5	0.65	< 0.5	32	< 0.5
W-1550	08-APR-15	E624MOD	5.5	4.1	<0.5	< 0.5	0.71	<1	<0.5	1.8	< 0.5	130	< 0.5
W-2203	08-APR-15	E624MOD	8.6	2.5	<0.5	<0.5	2	<1	1.8	5.7	<0.5	89	<0.5
TFD-HPD													
W-1254	09-APR-15	E624MOD	1.5	< 0.5	< 0.5	< 0.5	<0.5	<1	<0.5	< 0.5	< 0.5	35	<0.5
W-1650	23-APR-15	E624MOD	1.7	1.3	< 0.5	< 0.5	<0.5	3.6	0.99	< 0.5	< 0.5	110	<0.5
W-1653	23-APR-15	E624MOD	< 0.5	< 0.5	<0.5	< 0.5	<0.5	32	<0.5	< 0.5	< 0.5	37	< 0.5
W-1655	23-APR-15	E624MOD	< 0.5	1.3	< 0.5	< 0.5	< 0.5	1	< 0.5	1.6	< 0.5	39	< 0.5
W-1657	23-APR-15	E624MOD	8.4	4	<0.5	<0.5	<0.5	<1	2.6	<0.5	<0.5	940	<0.5
TFD-S													
W-1503	08-APR-15	E624MOD	1.4	1.6	< 0.5	< 0.5	1.2	<1	<0.5	1.8	<0.5	41	< 0.5
W-1504	08-APR-15	E624MOD	< 0.5	1.1	< 0.5	< 0.5	8	<1	2	11	< 0.5	59	< 0.5
W-1510	08-APR-15	E624MOD	< 0.5	1.1	< 0.5	< 0.5	2.2	<1	<0.5	4.1	<0.5	29	< 0.5
W-2601	08-APR-15	E624MOD	< 0.5	6.3	< 0.5	< 0.5	2.9	<1	1.6	4.8	<0.5	53	<0.5

Table A-2. VOC analyses of samples from treatment facility extraction wells.

Extraction	Date	Analytic	0	05051	4450:	4050	44505	4 0 505	<b>.</b>	DC=	444-01	<b>T</b> C=	
Well	Sampled	Method	CTET <-	CFORM -	1,1-DCA -	1,2-DCA -	1,1-DCE ug/L (ppb)	1,2-DCE -	Freon 113	PCE -	1,1,1-TCA -	TCE -	Freon 1
TFD-SE													
W-314	01-APR-15	E624MOD	< 0.5	< 0.5	0.55	< 0.5	0.96	<1	< 0.5	1.7	< 0.5	8.1	< 0.5
W-2005	01-APR-15	E624MOD	< 0.5	0.98	< 0.5	0.69	11	<1	< 0.5	25	< 0.5	49	< 0.5
W-1308	01-APR-15	E624MOD	< 0.5	1.3	0.84	2.4	14	<1	<0.5	57	< 0.5	89	< 0.5
W-1403	01-APR-15		2	16	1.2	4.7	36	<1	3.6	80	< 0.5	290	< 0.5
W-1904 <sup>a</sup>	02-JUN-14	E601	< 0.5	< 0.5	< 0.5	< 0.5	1.4	<1	< 0.5	13	< 0.5	6	< 0.5
SIP-ETC-201 <sup>a</sup>	18-MAR-15	E601	<0.5	0.67	2.5	0.88	70	<1	<0.5	380	<0.5	230	<0.5
TFD-SS													
W-1523	01-APR-15	E624MOD	3.6	3	< 0.5	1.5	14	<1	1.2	16	< 0.5	140	< 0.5
W-1601	01-APR-15		3.5	3.9	1.3	5.2	24	1	1.2	83	< 0.5	210	< 0.5
W-1602	01-APR-15	E624MOD	< 0.5	1.4	< 0.5	< 0.5	0.5	<1	< 0.5	0.98	< 0.5	8.9	1.2
W-1603	01-APR-15		1.2	2.2	0.71	2.4	11	<1	<0.5	17	<0.5	120	6.2
TFD-W													
W-1215	08-APR-15	E624MOD	< 0.5	9.2	<0.5	< 0.5	< 0.5	<1	< 0.5	< 0.5	< 0.5	4.3	16
W-1216	08-APR-15	E624MOD	< 0.5	4.7	<0.5	< 0.5	< 0.5	<1	< 0.5	< 0.5	< 0.5	2	20
W-1902	08-APR-15	E624MOD	<0.5	3.4	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	3.7	42
TFE-E													
W-566	02-APR-15	E624MOD	0.7	4.7	< 0.5	0.53	6.3	<1	7.1	6.3	< 0.5	68	< 0.5
W-1109	02-APR-15	E624MOD	< 0.5	< 0.5	< 0.5	< 0.5	21	<1	3.7	32	< 0.5	110	< 0.5
W-1903	02-APR-15	E624MOD	< 0.5	< 0.5	< 0.5	< 0.5	12	<1	3.2	10	< 0.5	22	< 0.5
W-1909 <sup>a</sup>	14-NOV-11	E601	< 0.5	< 0.5	<0.5	< 0.5	9.1	1.1	< 0.5	5.4	< 0.5	6.5	< 0.5
W-2305 <sup>a</sup>	01-OCT-14	E601	<0.5	<0.5	<0.5	<0.5	11	<1	2.7	18	<0.5	39	<0.5
TFE-HS													
W-2105	01-APR-15	E624MOD	< 0.5	< 0.5	< 0.5	< 0.5	0.77	<1	1.4	5.7	< 0.5	83	< 0.5
W-2801	01-APR-15	E624MOD	3.7	2.1	<0.5	<0.5	5.6	2.2	2.3	7.5	<0.5	250	<0.5
TFE-NW													
W-1211	08-APR-15	E624MOD	<0.5	1.5	< 0.5	< 0.5	< 0.5	<1	1.4	< 0.5	<0.5	8	<0.5
W-1409	08-APR-15	E624MOD	<0.5	0.5	<0.5	<0.5	0.51	<1	<0.5	1.4	<0.5	28	<0.5
TFE-SE													
W-359	01-APR-15	E624MOD	2.3	2.2	<0.5	<0.5	12	<1	5.7	6.8	<0.5	150	<0.5
TFE-SW													
W-1516	08-APR-15		<0.5	1.3	< 0.5	< 0.5	< 0.5	<1	0.61	< 0.5	<0.5	7.9	<0.5
W-1518 <sup>a</sup>	13-JAN-15	E601	< 0.5	< 0.5	<0.5	< 0.5	1.4	1.1	0.63	0.55	<0.5	9.5	< 0.5

Table A-2. VOC analyses of samples from treatment facility extraction wells.

Extraction	Date	Analytic		050511			4 4 505	40.505	- 440		=0.		
Well	Sampled	Method	CTET <-	CFORM -	1,1-DCA -	1,2-DCA -	ug/L (ppb)	1,2-DCE -	Freon 113 -	PCE -	1,1,1-TCA -	TCE -	Freon 11 ->
TFE-SW (cont.)													
W-1520	08-APR-15	E624MOD	5.1	3.4	< 0.5	1.4	1.1	1	<0.5	5.7	< 0.5	110	< 0.5
W-1522	08-APR-15	E624MOD	10	5.8	<0.5	2.3	6.2	5.8	0.67	10	<0.5	220	<0.5
TFE-W													
W-292	08-APR-15	E624MOD	< 0.5	0.83	< 0.5	< 0.5	0.95	2.3	1.2	1.3	< 0.5	18	< 0.5
W-305	08-APR-15	E624MOD	<0.5	1	<0.5	<0.5	1.7	<1	10	8.6	<0.5	29	<0.5
TFG-1													
W-1111	15-APR-15	E624MOD	3.2	9.4	<0.5	<0.5	0.79	<1	<0.5	1	<0.5	4.1	<0.5
TFG-N													
W-1806	15-APR-15	E624MOD	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	<1	<0.5	8	< 0.5	2	< 0.5
W-1807	15-APR-15	E624MOD	<0.5	1.4	<0.5	<0.5	1.6	<1	1.5	19	<0.5	5.1	<0.5
TF406													
W-1309	08-APR-15	E624MOD	0.6	< 0.5	< 0.5	< 0.5	< 0.5	<1	< 0.5	< 0.5	< 0.5	2.8	< 0.5
W-1310	08-APR-15	E624MOD	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	3.5	<0.5
TF406-NW													
W-1801	15-APR-15	E624MOD	<0.5	1.7	<0.5	<0.5	<0.5	<1	3.5	0.82	<0.5	15	<0.5
TF518-N <sup>b</sup>													
W-1410	20-APR-15	E624MOD	1.9	2	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	12	<0.5
TF518-PZ													
W-1615	30-APR-15	E624MOD	< 0.5	< 0.5	< 0.5	< 0.5	2.8	<1	< 0.5	26	< 0.5	150	< 0.5
W-518-1913 <sup>a</sup>	23-MAY-11	E601	< 0.5	<0.5	< 0.5	< 0.5	0.76	<1	< 0.5	3.8	< 0.5	29	< 0.5
W-518-1914	30-APR-15	E624MOD	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	<1	< 0.5	59	< 0.5	5.1	< 0.5
W-518-1915	30-APR-15	E624MOD	< 0.5	0.74	< 0.5	< 0.5	2.6	<1	< 0.5	44	< 0.5	410	< 0.5
SVB-518-201 <sup>a</sup>	07-FEB-08	E601	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	<1	< 0.5	35	< 0.5	8.5	< 0.5
SVB-518-204 <sup>a</sup>	07-FEB-08	E601	<0.5	0.63	<0.5	<0.5	1.4	<1	<0.5	43	<0.5	550	<0.5
TF5475-1 <sup>b</sup>													
W-1302-2	22-APR-15	E624MOD	2.5	40	1.5	5.1	29	2.2	9.1	58	<0.5	420	<0.5
TF5475-2													
W-1108	01-APR-15	E624MOD	1.7	17	0.5	2.5	15	<1	4.3	30	<0.5	230	< 0.5
W-1415 <sup>a</sup>	04-SEP-14	E601	1.4			2.2			4.2				

Table A-2. VOC analyses of samples from treatment facility extraction wells.

Extraction Well	Date Sampled	Analytic Method	CTET <-	CFORM -	1,1-DCA -	1,2-DCA -	1,1-DCE ug/L (ppb)	,	Freon 113	PCE -	1,1,1-TCA -	TCE -	Freon 11
TF5475-3 <sup>b</sup>													
W-1604 <sup>c</sup>	11-JUN-15	E624MOD	4.1	59	1.5	14	39	3.6	9.6	91	<1	730	<1
W-1605	27-MAY-15	E624MOD	< 0.5	12	< 0.5	1.2	<0.5	<1	<0.5	2	< 0.5	23	<0.5
W-1608	27-MAY-15	E624MOD	< 0.5	12	< 0.5	1.8	< 0.5	<1	< 0.5	1.5	< 0.5	14	< 0.5
W-1609	27-MAY-15	E624MOD	<0.5	29	<0.5	2.1	3.6	<1	0.53	9.8	<0.5	82	<0.5

Notes on following page.

### Table A-2. VOC analyses of samples from treatment facility extraction wells.

### Notes:

CTET = Carbon tetrachloride

CFORM = Chloroform

1,1-DCA = 1,1-Dichloroethane

1,2-DCA = 1,2-Dichloroethane

1,1-DCE = 1,1-Dichloroethylene

1,2-DCE = 1,2-Dichloroethylene

Freon 113 = Trichlorotrifluoroethane

PCE = Tetrachloroethylene

1,1,1-TCA = 1,1,1-Trichloroethane

TCE = Trichloroethene

Freon 11 = Trichlorofluoromethane

VOC = Volatile organic compound

Numbers in **BOLD** print indicate positive values above the detection limit.

<sup>&</sup>lt;sup>a</sup> Most recent VOC sample results available.

<sup>&</sup>lt;sup>b</sup> Treatment Facility did not operate during reporting period. Please refer to Table A-1 for details.

<sup>&</sup>lt;sup>c</sup> Elevated reporting limit due to sample dilution.

Table A-3. VOC analyses of vapor samples from treatment facility extraction wells.

Extraction	Date	Analytic											
Well	Sampled	Method	CTET	CFORM	1,1-DCA	1,2-DCA		1,2-DCE	Freon 113	PCE	1,1,1-TCA	TCE	Freon 11
			<-	-	-	-	PPM(V/V)	-	-	-	-	-	->
VTFD-ETCS													
W-1904	29-APR-15	TO15DIT	<0.019	<0.019	<0.019	< 0.019	< 0.019	< 0.019	<0.019	0.15	< 0.019	0.054	<0.019
W-ETC-2003	29-APR-15	TO15DIT	< 0.0084	< 0.0084	< 0.0084	<0.0084	< 0.0084	<0.0084	<0.0084	0.072	<0.0084	0.021	<0.0084
W-ETC-2004A	29-APR-15	TO15DIT	<0.035	<0.035	< 0.035	<0.035	< 0.035	<0.035	<0.035	0.24	< 0.035	0.068	<0.035
W-ETC-2004B	29-APR-15	TO15DIT	< 0.23	< 0.23	< 0.23	< 0.23	< 0.23	< 0.23	<0.23	0.37	< 0.23	1.4	<0.23
SIP-ETC-201	29-APR-15	וועפוטו	<0.042	<0.042	<0.042	<0.042	<0.042	<0.042	<0.042	0.29	<0.042	0.32	<0.042
VTFE-ELM													
W-1903	29-APR-15	TO15DIT	<0.15	<0.15	<0.15	< 0.15	0.52	< 0.15	<0.15	0.47	<0.15	1	<0.15
W-1909 <sup>a</sup>	30-SEP-14	TO15DIT	< 0.005	< 0.005	0.0082	< 0.005	1.2	< 0.005	0.38	0.71	< 0.005	1.6	< 0.005
W-2305 <sup>a</sup>	06-OCT-11	TO15DIT	< 0.005	< 0.005	< 0.005	<0.005	0.2	< 0.005	0.036	0.46	< 0.005	0.55	< 0.005
W-543-001	29-APR-15	TO15DIT	< 0.067	< 0.067	< 0.067	< 0.067	< 0.067	< 0.067	< 0.067	0.4	< 0.067	0.22	< 0.067
W-543-003	29-APR-15	TO15DIT	<0.029	< 0.029	< 0.029	< 0.029	< 0.029	< 0.029	< 0.029	0.055	< 0.029	0.2	< 0.029
W-543-1908	29-APR-15	TO15DIT	<0.049	<0.049	<0.049	<0.049	<0.049	<0.049	<0.049	0.06	<0.049	0.22	<0.049
VTFE-HS													
W-2105	12-MAY-15	TO15DIT	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32	1.4	< 0.32
W-ETS-2008A	12-MAY-15		< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.0051	< 0.005	0.0063	< 0.005
W-ETS-2008B	12-MAY-15		< 0.058	<0.058	<0.058	<0.058	<0.058	<0.058	<0.058	0.23	<0.058	0.23	<0.058
W-ETS-2009	12-MAY-15		< 0.042	< 0.042	< 0.042	< 0.042	< 0.042	< 0.042	< 0.042	0.077	< 0.042	0.21	< 0.042
W-ETS-2010A	12-MAY-15	TO15DIT	< 0.017	< 0.017	< 0.017	< 0.017	< 0.017	< 0.017	< 0.017	0.11	< 0.017	0.095	< 0.017
W-ETS-2010B	12-MAY-15	TO15DIT	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.013	<0.005	0.017	<0.005
VTF406-HS													
W-217	29-APR-15	TO15DIT	<0.28	<0.28	<0.28	<0.28	0.59	<0.28	<0.28	0.42	<0.28	1.3	<0.28
W-514-2007A	29-APR-15	TO15DIT	<1.1	<1.1	<1.1	<1.1	<1.1	<1.1	<1.1	<1.1	<1.1	<1.1	7.5
W-514-2007B	29-APR-15	TO15DIT	<0.096	<0.096	<0.096	<0.096	0.35	<0.096	<0.096	0.16	< 0.096	0.52	0.14
VTF511													
W-2204	09-JUN-15	TO15DIT	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	5.1	<1.5
W-2205	09-JUN-15	TO15DIT	< 0.084	< 0.084	< 0.084	< 0.084	<0.084	<0.084	<0.084	< 0.084	<0.084	0.7	<0.084
W-2206	09-JUN-15	TO15DIT	<0.21	<0.21	<0.21	<0.21	<0.21	<0.21	<0.21	<0.21	<0.21	1.1	<0.21
W-2207A	09-JUN-15	TO15DIT	<0.005	<0.005	<0.005	<0.005	< 0.005	<0.005	< 0.005	0.01	< 0.005	0.14	<0.005
W-2207B	09-JUN-15	TO15DIT	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12	0.75	<0.12
W-2208A	09-JUN-15	TO15DIT	< 0.085	<0.085	< 0.085	< 0.085	< 0.085	<0.085	< 0.085	< 0.085	< 0.085	2.4	< 0.085
W-2208B	09-JUN-15	TO15DIT	<1.7	<1.7	<1.7	<1.7	<1.7	<1.7	<1.7	<1.7	<1.7	6.7	<1.7
VTF518-PZ													
W-1615	12-MAY-15	TO15DIT	<0.66	<0.66	<0.66	<0.66	<0.66	< 0.66	<0.66	1.3	<0.66	2.3	<0.66
W-518-1913	12-MAY-15		<0.51	<0.51	<0.51	<0.51	0.56	<0.51	<0.51	0.74	<0.51	3	<0.51
5.5 .516	10	. 5 . 5 . 1	٠٠.٠٠	٠٠.٠٠	٠٠.٠٠	30.01	0.00	١٥.٥،	30.01	<b></b> .	٠٠.٠٠	•	30.01

Table A-3. VOC analyses of vapor samples from treatment facility extraction wells.

Extraction Well	Date Sampled	Analytic Method	CTET <-	CFORM -	1,1-DCA -	1,2-DCA -	1,1-DCE PPM(V/V)	1,2-DCE -	Freon 113	PCE -	1,1,1-TCA -	TCE -	Freon 11
VTF518-PZ (cont.)													
W-518-1914	12-MAY-15	TO15DIT	< 0.66	< 0.66	< 0.66	< 0.66	< 0.66	< 0.66	< 0.66	2.2	< 0.66	< 0.66	< 0.66
W-518-1915	12-MAY-15	TO15DIT	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	0.63	< 0.2	0.27	<0.2
SVB-518-201	12-MAY-15	TO15DIT	<0.0085	<0.0085	<0.0085	<0.0085	0.015	<0.0085	<0.0085	0.031	< 0.0085	0.059	< 0.0085
SVB-518-204	12-MAY-15	TO15DIT	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	0.77	<0.17
VTF5475 <sup>b</sup>													
W-1605	09-JUN-15	TO15DIT	< 0.005	0.039	< 0.005	< 0.005	0.016	< 0.005	< 0.005	0.014	< 0.005	0.13	< 0.005
W-1608	09-JUN-15	TO15DIT	0.0055	0.096	< 0.005	0.0052	0.056	< 0.005	0.048	0.048	< 0.005	0.24	< 0.005
W-2211	11-JUN-15	TO15DIT	< 0.014	0.037	< 0.014	< 0.014	0.019	< 0.014	< 0.014	0.02	< 0.014	0.15	< 0.014
W-2212	11-JUN-15	TO15DIT	< 0.064	0.11	< 0.064	< 0.064	0.16	< 0.064	< 0.064	< 0.064	< 0.064	0.48	< 0.064
W-ETS-507	09-JUN-15	TO15DIT	< 0.0083	0.35	<0.0083	<0.0083	< 0.0083	<0.0083	< 0.0083	0.093	< 0.0083	0.36	< 0.0083
W-2302	09-JUN-15	TO15DIT	< 0.2	< 0.2	< 0.2	< 0.2	0.82	< 0.2	0.27	0.55	< 0.2	5.7	<0.2
W-2303	11-JUN-15	TO15DIT	< 0.011	0.032	< 0.011	<0.011	< 0.011	<0.011	< 0.011	0.016	< 0.011	0.11	< 0.011
SVI-ETS-504	11-JUN-15	TO15DIT	<0.084	0.22	<0.084	<0.084	<0.084	<0.084	<0.084	0.14	<0.084	0.62	<0.084

Notes on following page.

### Table A-3. VOC analyses of vapor samples from treatment facility extraction wells.

Notes:

CTET = Carbon tetrachloride

CFORM = Chloroform

1,1-DCA = 1,1-Dichloroethane

1,2-DCA = 1,2-Dichloroethane

1,1-DCE = 1,1-Dichloroethylene

1,2-DCE = 1,2-Dichloroethylene

Freon 113 = Trichlorotrifluoroethane

PCE = Tetrachloroethylene

1,1,1-TCA = 1,1,1-Trichloroethane

TCE = Trichloroethene

Freon 11 = Trichlorofluoromethane

VOC = Volatile organic compound

Numbers in **BOLD** print indicate positive values above the detection limit.

<sup>&</sup>lt;sup>a</sup> Most recent VOC vapor sample results available.

<sup>&</sup>lt;sup>b</sup> VTF5475 did not operate during reporting period due to mixed waste disposition issues.

Table A-4. Chromium analyses of influent, effluent and receiving water samples by treatment facility.

Treatment Facility	Sample Station	Date Sampled	Chromium (total) <sup>a</sup> mg/L (ppm)	Hexavalent Chromium mg/L (ppm)
TFB	TFB-E002	02-APR-15	0.016	NA
	TFB-E002	04-MAY-15	0.017	NA
	TFB-E002	04-MAY-15	0.016	NA
	TFB-E002	01-JUN-15	0.015	NA
TFC	TFC-E003	02-APR-15	0.019	NA
	TFC-E003	04-MAY-15	0.021	NA
	TFC-E003	01-JUN-15	0.017	NA
TFC-E	MTU1-E	09-APR-15	0.032	NA
	MTU1-E	13-MAY-15	0.033	NA
	MTU1-E	17-JUN-15	0.034	NA
TFC-SE	PTU1-E	02-APR-15	0.028	NA
	PTU1-E	04-MAY-15	0.023	NA
	PTU1-E	01-JUN-15	0.022	NA

<sup>&</sup>lt;sup>a</sup>A discharge limit of 0.050 ppm is set for total chromium during the dry season (April 1-November 30), and no limit is set for total chromium for the wet season (December 1-March 31); however, a limit of 0.022 ppm hexavalent chromium applies during the wet season. Discharge limits are defined in the Explanation of Significant Differences for metals discharge limits (April 1997).

Shaded values exceeded the discharge limit. See text for explanation.

### **Explanation of Abbreviations**

TFA-I001 is a sampling port located immediately prior to the TFA Treatment System.

TFA-E001 is a sampling port located immediately after the TFA Treatment System, at the beginning of the discharge pipeline.

TFA receiving water is routinely sampled at the TFG-ASW location.

TFB-I002 is a sampling port located immediately prior to the TFB Treatment System.

TFB-E002 is a sampling port located immediately after the TFB Treatment System, at the beginning of the discharge pipeline.

TFB-R002 is a sampling station in the drainage ditch north of TFB, located approximately 75 ft downstream from the discharge point.

TFC-I003 is a sampling port located immediately prior to the TFC Treatment System.

TFC-E003 is a sampling port located immediately after the TFC Treatment System, at the beginning of the discharge pipeline.

TFC-R003 is a sampling station in Arroyo Las Positas, located approximately 75 ft downstream from the TFC discharge point.

TFD-l004 is a sampling port located immediately prior to the TFD Treatment System.

TFD-E004 is a sampling port located immediately after the TFD Treatment System, prior to discharge to the Lake Haussmann or to the underground discharge pipeline leading to Arroyo Las Positas.

TFD-R004 is now combined with and collected at the TFC-R003 location. Results are reported under TFC-R003, as approved by the RWOCB.

CRD1-I is a sampling port located immediately prior to the catalytic column in the Catalytic Reductive Dehalogenation treatment unit 1 (CRD1).

CRD1-E is the effluent from the catalytic column in the Catalytic Reductive Dehalogenation treatment unit 1 (CRD1) and then reinjected at W-1302.

CRD2-I is a sampling port located immediately prior to the catalytic columns in the Catalytic Reductive Dehalogenation treatment unit 2 (CRD2).

CRD2-E is the effluent from the last catalytic column in the Catalytic Reductive Dehalogenation treatment unit 2 (CRD2) and then reinjected at W-1610.

GTU01-I is a sampling port located immediately prior to GTU01, which is currently operating in the TFG-1 area.

GTU01-E is a sampling port located immediately after GTU01, which is currently operating in the TFG-1 area.

GTU01 receiving water is routinely sampled at the TFG-ASW location.

GTU03-I is a sampling port located immediately prior to GTU03, which is currently operating in the TF406 Northwest area.

GTU03-E is a sampling port located immediately after GTU03, which is currently operating in the TF406 Northwest area.

GTU03 receiving water is routinely sampled at the TFC-R003 location.

GTU07-I is a sampling port located immediately prior to GTU07, which is currently operating in the TFE Hotspot area.

GTU07-E is a sampling port located immediately after GTU07, which is currently operating in the TFE Hotspot area.

GTU07 receiving water is routinely sampled at the TFC-R003 location.

GTU09-I is a sampling port located immediately prior to GTU09, which is currently operating in the TF5475 area.

GTU09-E is a sampling port located immediately after GTU09, which is currently operating in the TF5475 area.

GTU09 receiving water is routinely sampled at the TFC-R003 location.

MTU02-I is a sampling port located immediately prior to MTU02, which is currently operating in the TFG North area.

MTU02-E is a sampling port located immediately after MTU02, which is currently operating in the TFG North area.

MTU02 receiving water is routinely sampled at the TFC-R003 location.

MTU03-I is a sampling port located immediately prior to MTU03, which is currently operating in the TFE Southwest area.

MTU03-E is a sampling port located immediately after MTU03, which is currently operating in the TFE Southwest area.

MTU03 receiving water is routinely sampled at the TFC-R003 location.

MTU04-I is a sampling port located immediately prior to MTU04, which is currently operating in the TFE Southeast area.

MTU04-E is a sampling port located immediately after MTU04, which is currently operating in the TFE Southeast area.

MTU04 receiving water is routinely sampled at the TFC-R003 location.

MTU05-I is a sampling port located immediately prior to MTU05, which is currently operating in the TFE West area.

MTU05-E is a sampling port located immediately after MTU05, which is currently operating in the TFE West area.

MTU05 receiving water is routinely sampled at the TFC-R003 location.

MTU1-I is a sampling port located immediately prior to MTU1, which is currently operating in the TFC East area.

MTU1-E is a sampling port located immediately after MTU1, which is currently operating in the TFC East area.

### **Explanation of Abbreviations**

MTU1 receiving water is routinely sampled at the TFC-R003 location.

PTU1-I is a sampling port located immediately prior to PTU-1, which is currently operating in the TFC Southeast area.

PTU1-E is a sampling port located immediately after PTU-1, which is currently operating in the TFC Southeast area.

PTU1 receiving water is routinely sampled at the TFC-R003 location.

PTU2-I is a sampling port located immediately prior to PTU-2, which is currently operating in the TFD South area.

PTU2-E is a sampling port located immediately after PTU-2, which is currently operating in the TFD South area.

PTU2 receiving water is routinely sampled at TFC-R003 during the wet season.

PTU3-I is a sampling port located immediately prior to PTU-3, which is currently operating in the TFE East area.

PTU3-E is a sampling port located immediately after PTU-3, which is currently operating in the TFE East area.

PTU3 receiving water is routinely sampled at the TFC-R003 location.

PTU5-I is a sampling port located immediately prior to PTU-5, which is currently operating in the TF406 extraction location.

PTU5-E is a sampling port located immediately after PTU-5, which is currently operating in the TF406 extraction location.

PTU5 receiving water is routinely sampled at the TFC-R003 location.

PTU6-I is a sampling port located immediately prior to PTU-6, which is currently operating in the TFD West area.

PTU6-E is a sampling port located immediately after PTU-6, which is currently operating in the TFD West area.

PTU6 receiving water is routinely sampled at the TFC-R003 location.

PTU8-I is a sampling port located immediately prior to PTU-8, which is currently operating in the TFD East area.

PTU8-E is a sampling port located immediately after PTU-8, which is currently operating in the TFD East area.

PTU8 receiving water is routinely sampled at the TFC-R003 location.

PTU9-I is a sampling port located immediately prior to PTU-9, which is currently operating in the TFE Northwest area.

PTU9-E is a sampling port located immediately after PTU-9, which is currently operating in the TFE Northwest area.

PTU9 receiving water is routinely sampled at the TFC-R003 location.

PTU10-I is a sampling port located immediately prior to PTU-10, which is currently operating in the TFD Helipad area.

PTU10-E is a sampling port located immediately after PTU-10, which is currently operating in the TFD Helipad area.

PTU10 receiving water is routinely sampled at the TFC-R003 location.

PTU11-I is a sampling port located immediately prior to PTU-11, which is currently operating in the TFD Southeast area.

PTU11-E is a sampling port located immediately after PTU-11, which is currently operating in the TFD Southeast area.

PTU11 receiving water is routinely sampled at the TFC-R003 location.

PTU12-I is a sampling port located immediately prior to PTU-12, which is currently operating in the TFD Southshore area.

PTU12-E is a sampling port located immediately after PTU-12, which is currently operating in the TFD Southshore area.

PTU12 receiving water is routinely sampled at the TFC-R003 location.

STU06-I is a sampling port located immediately prior to STU06, which is operating in the TFA East area.

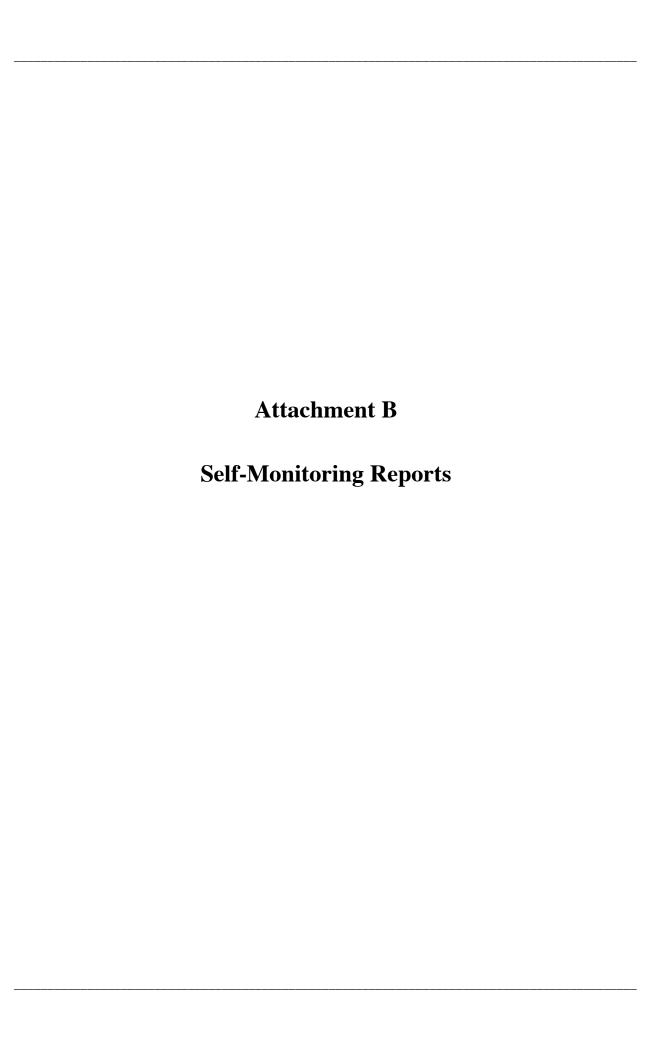
STU06-E is a sampling port located immediately after STU06, which is operating in the TFA East area.

STU06 receiving water is routinely sampled at the TFG-ASW location.

STU09-I is a sampling port located immediately prior to STU09, which is currently operating in the TF518-North area.

STU09-E is a sampling port located immediately after STU09, which is currently operating in the TF518-North area.

STU09 receiving water is routinely sampled at the TFC-R003 location.



## Self-Monitoring Report LLNL Treatment Facility A (TFA) AREA TFA

1. Reporting Period: Business Month April Year 2015

2. Dates (in **bold** and <u>underline</u>) treated ground water was discharged

April 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30

Total monthly time facility operated (hours): 641

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y):	04-09-2015
Influent pH:	7.5
Effluent pH:	7.5
Effluent Temperature (°C):	<u>21</u>

4. Wellfield Data:

	Monthly	Instantaneous
Source	Volume(gal)	Flow Rate(gpm)
W-109	1,024	0.0
W-262	146	0.0
W-404	1,203,632	32.3
W-408	1,084,360	28.6
W-415	1,525,856	38.8
W-457	297,856	7.4
W-518	160,466	4.0
W-522	525,696	13.9
W-605	342,604	8.9
W-614	434,408	11.5
W-712	195,912	5.4
W-714	230,592	5.9
W-903	499,704	12.7
W-904	600,272	16.6
W-1001	50,794	1.3
W-1004	391,808	10.7
W-1009	838,452	22.4
Total:	8,383,582	220.4

5. Discharge Information:

Discharge Location Receiving Water Station

West Perimeter Drainage Channel TFB-R002 4,474,978

Volume

## Self-Monitoring Report (cont'd) LLNL Treatment Facility A (TFA) AREA TFA

Arroyo Seco

**TFG-ASW** 

3,908,604

6. Comments:

Facility was shutdown on 04-05-2015 due to I/O fault. Facility was restarted on 04-07-2015. Facility was shutdown on 04-11-2015 due to I/O fault. Facility was restarted on 04-13-2015.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:

Date: 05-01-2015

## Self-Monitoring Report LLNL Treatment Facility A (TFA) AREA TFA

- 1. Reporting Period: Business Month May Year 2015
- 2. Dates (in **bold** and <u>underline</u>) treated ground water was discharged

May 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29

Total monthly time facility operated (hours): 704

### 3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y):	05-01-2015
Influent pH:	7.5
Effluent pH:	7.5
Effluent Temperature (°C):	19.3

### 4. Wellfield Data:

	Monthly	Instantaneous
Source	Volume(gal)	Flow Rate(gpm)
W-109	0	0.0
W-262	0	0.0
W-404	1,316,656	30.9
W-408	1,188,800	28.6
W-415	1,737,216	40.7
W-457	324,248	7.7
W-518	178,654	4.3
W-522	580,544	13.7
W-605	374,808	9.2
W-614	479,704	11.7
W-1001	56,022	1.4
W-1004	440,304	10.7
W-1009	885,788	22.0
W-712	216,120	5.2
W-714	258,844	6.1
W-903	534,016	12.5
W-904	655,952	15.5
Total:	9,227,676	220.2

### 5. Discharge Information:

Discharge Location	Water Station	<u>Volume</u>
West Perimeter Drainage Channel	<b>TFB-R002</b>	4,938,461

Receiving

# Self-Monitoring Report (cont'd) LLNL Treatment Facility A (TFA) AREA TFA

Arroyo Seco	TFG-ASW	4,289,215
6. Comments:		
7. I certify that the information in this re	port, to the best of my knowle	edge, is true and correct
Operator Signature:	Date:	<u>)6-01-2015</u>

## Self-Monitoring Report LLNL Treatment Facility A (TFA) AREA TFA

- 1. Reporting Period: Business Month June Year 2015
- 2. Dates (in **bold** and <u>underline</u>) treated ground water was discharged

May June 30 31 10 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30

Total monthly time facility operated (hours): 762

3. Monthly Compliance Data:

4. Wellfield Data:

	Monthly	Instantaneous
Source	Volume(gal)	Flow Rate(gpm)
W-109	0	0.0
W-262	0	0.0
W-404	1,476,340	32.4
W-408	1,275,560	28.3
W-415	1,916,784	42.2
W-457	365,792	7.8
W-518	190,362	4.1
W-522	601,624	12.9
W-605	403,376	9.0
W-614	522,540	11.9
W-712	229,600	5.0
W-714	279,384	6.2
W-903	551,024	11.6
W-904	734,208	16.2
W-1001	62,256	1.3
W-1004	328,536	8.8
W-1009	963,824	20.6
Total:	9,901,210	218.3

5. Discharge Information:

Discharge Location Receiving
Water Station Volume

West Perimeter Drainage Channel TFB-R002 5,264,564

## Self-Monitoring Report (cont'd) LLNL Treatment Facility A (TFA) AREA TFA

Arroyo Seco	Arrovo	Seco
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TFG-ASW

4,636,646

6. Comments:

Facility was shutdown on 06-11-2015 for interlock checks. Facility was restarted on 06-12-2015.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:

Date: 07-01-2015

# Self-Monitoring Report LLNL Solar Treatment Unit 06 (STU06) AREA TFA-E

1. Reporting Per	1. Reporting Period: Business Month April Year 2015															
2. Dates (in <b>bold</b> and <u>underline</u> ) treated ground water was discharged																
April	01 16	02 17	03 18	04 19		06 21	07 22	08 23	09 24	10 25	11 26	12 27	13 28	14 29	15	
Total monthly time facility operated (hours): _0																
3. Monthly Compliance Data:																
Date compliance sampling performed (m/d/y): Not Measured Influent pH: Effluent pH: Effluent Temperature (°C):																
4. Wellfield Data:																
Source	Monthly Instantaneous  Volume(gal) Flow Rate(gpm)															
W-254				0			0.0	)								
Total:			10.00111	0			0.0	<u>)</u>								
5. Discharge Info	orma	ition:	:						D.							
Discharge	Loc	ation	Ī							eivii ter S	_	<u>n</u>	Ž	Volur	<u>me</u>	
Arroyo	Seco	<u> </u>							_ <u>T</u>	FG-	ASV	<u>v</u>		-	_0	
6. Comments: Facility secured due to lack of water in extraction well.																
7. I certify that the information in this report, to the best of my knowledge, is true and correct.																
Operator Signatu	Operator Signature: Low Gway Date: 04-30-2015															

# Self-Monitoring Report LLNL Solar Treatment Unit 06 (STU06) AREA TFA-E

1. Reporting Per	riod:	Busi	iness	Mon	nth	M	<u>ay</u>	Year	<u>201</u>	<u>5</u>						
2. Dates (in <b>bold</b> and <u>underline</u> ) treated ground water was discharged																
April May		02 17		04 19				08 23					13 28	14	15	
Total monthly time facility operated (hours): _0																
3. Monthly Compliance Data:																
Date compliance sampling performed (m/d/y): Not Measured Influent pH: Effluent pH: Effluent Temperature (°C):																
4. Wellfield Dat	a:															
Source	Monthly Instantaneous Source Volume(gal) Flow Rate(gpm)															
W-254				0			0.0	0								
Total:	:			<u>0</u>			0.0	<u>D</u>								
5. Discharge Info	orma	tion:							D	! ! .	2000					
Discharge	Loc	ation	<u>l</u>							eivii ter S	_	<u>n</u>	Ž	Volur	<u>ne</u>	
Arroyo	Seco	2							_ <u>T</u>	FG-	ASV	<u>V</u>			_0	
6. Comments: Facility se	cure	d due	e to l	ack o	of wa	ater i	n ex	tracti	on w	ell.						
7. I certify that the information in this report, to the best of my knowledge, is true and correct.																
Operator Signature: State Glosson G Date: 05-29-2015																

# Self-Monitoring Report LLNL Solar Treatment Unit 06 (STU06) AREA TFA-E

1. Reporting Per	iod:	Busi	ness	Moi	nth	_Ju	<u>ne</u>	Year	r <u>201</u>	<u>5</u>					
2. Dates (in bol	d an	d <u>un</u>	derli	<u>ne</u> )	trea	ted g	roun	d wa	iter v	vas d	lisch	argeo	i		
May June	01			04 19				08 23			11 26	12 27	13 28		15
Total monthly time facility operated (hours): _0															
3. Monthly Com	plia	nce I	Data:												
Date compli Influent pH: Effluent pH: Effluent Ter					form	ed (1	m/d/	y): <u>N</u>	ot M	<u>Ieas</u>	ured				
4. Wellfield Data	a:														
Source	Monthly Instantaneous  Source Volume(gal) Flow Rate(gpm)														
W-254				0			0.0	)							
Total:	52			<u>0</u>			0.0	<u>)</u>							
5. Discharge Info	orma	ation:							Rec	eivi	ng				
Discharge	Loc	ation	L								tatio	<u>n</u>	7	Volu	<u>me</u>
Arroyo	Seco	<u> </u>							_ <u>T</u>	FG-	ASV	<u>V</u>			0
6. Comments: Facility se	cure	d du	e to l	ack (	of wa	ater i	n ex	tracti	on w	æll.					
7. I certify that the information in this report, to the best of my knowledge, is true and correct.															
Operator Signature: State Courage Ci Date: 06-30-2015															

## Self-Monitoring Report LLNL Vapor Extraction System 13 (VES13) AREA TFA-E

- 1. Reporting Period: Business Month June Year 2015
- 2. Dates (in **bold** and <u>underline</u>) treatment facility operated

June 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30

### 3. Wellfield Data:

Source	Monthly Ir Volume(cu. ft)	nstantaneous low Rate(scfm)	P(in. Hg)		Iours f Op.
W-254	1,053	49.9	-6	70	0
W-1217	405	22.4	-16	82	1
W-116	254	18.0	-20	86	0
Total:	1,712	90.2			

### 4. Comments:

Facility was restarted on 06-17-2015 extracting from W-254. Facility was shutdown on 06-17-2015. Facility was restarted on 06-18-2015 extracting from W-1217. Facility was shutdown on 06-18-2015. Facility was restarted on 06-18-2015 extracting from W-116. Facility was shutdown on 06-18-2015.

5. I certify that the	information in t	his report, to th	e best of my	knowledge,	is true and co	rrect.
		4				

Operator Signature: Date: 07-13-2015

## Self-Monitoring Report LLNL Treatment Facility B (TFB) AREA TFB

1. Reporting Period: Business Month April Year 2015

2. Dates (in **bold** and <u>underline</u>) treated ground water was discharged

April 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30

Total monthly time facility operated (hours): 720

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y):

Influent pH:

Effluent pH:

Effluent Temperature (°C):

04-02-2015

7.5

19.3

4. Wellfield Data:

	Monthly	Instantaneous
Source	Volume(gal)	Flow Rate(gpm)
W-357	315,456	7.9
W-610	285,332	6.7
W-620	240,280	5.9
W-621	124	0.0
W-655	150	0.0
W-704	748,840	17.4
W-1423	143,204	4.0
W-2501	622,188	15.9
W-2502	184,817	4.5
Total:	2,540,391	62.3

5. Discharge Information:

	Receiving	
Discharge Location	Water Station	<u>Volume</u>
West Perimeter Drainage Channel	TFB-R002	1,994,341
<b>Building 133 Cooling Tower</b>	<b>TFB-E-B133C</b>	T 546,050

### 6. Comments:

Ion exchange resin columns removed from system on 4-1-15 due to conclusion of wet season.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

# Self-Monitoring Report (cont'd) LLNL Treatment Facility B (TFB) AREA TFB

Operator Signature: Date: 05-01-2015

# Land Observation Report date: TFB-R002 - West Perimeter Drainage Channel

1. Reporting Period: Business Month April Year 2015

2.	Date compliance sampling performed <u>04-02-2015</u>		
3.	Weather Conditions:		
	Average air tempertaure (°C): 6-day total precipitation (in): Average wind speed/direction (mph):	14.75 0.00 5/ SSW	
4.	Receiving Data:		
	Sample Location pH Temperature (C)  Receiving Water N/M N/M		
5.	Land Observations, as "Yes" or "No", for reporting r	nonth:	
	Visual Observations	Effluent	Receiving Water
	Floating and Suspended Materials of Waste Origin Odor Discoloration and Turbidity Evidence of Beneficial Water Use	No Not Required Not Required	No No No No
6.	Comments:		
7.	I certify that the information in this report, to the bes  Operator Signature:		

#### Self-Monitoring Report LLNL Treatment Facility B (TFB) AREA TFB

1. Reporting Period: Business Month May Year 2015

2. Dates (in **bold** and <u>underline</u>) treated ground water was discharged

May 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29

Total monthly time facility operated (hours): 706

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y):	05-04-2015
Influent pH:	7.0
Effluent pH:	7.5
Effluent Temperature (°C):	19.3

4. Wellfield Data:

	Monthly	Instantaneous
Source	Volume(gal)	Flow Rate(gpm)
W-357	324,384	7.8
W-610	284,304	6.9
W-620	224,544	5.6
W-621	0	0.0
W-655	0	0.0
W-704	727,344	17.4
W-1423	121,536	3.1
W-2501	681,944	16.3
W-2502	164,492	4.1
Total:	2,528,548	61.2

5. Discharge Information:

Discharge Location	Water Station	Volume
West Perimeter Drainage Channel	<b>TFB-R002</b>	1,937,716
<b>Building 133 Cooling Tower</b>	_TFB-E-B133	CT 590,832

Receiving

6. Comments:

<sup>7.</sup> I certify that the information in this report, to the best of my knowledge, is true and correct.

# Self-Monitoring Report (cont'd) LLNL Treatment Facility B (TFB) AREA TFB

Operator Signature: \_\_\_\_\_\_ Date: 06-01-2015

# Land Observation Report date: TFB-R002 - West Perimeter Drainage Channel

1. Reporting Period: Business Month May Year 2015

2.	Date compliance sampling performed <u>05-04-2015</u>		
3.	Weather Conditions:		
	Average air tempertaure (°C): 6-day total precipitation (in): Average wind speed/direction (mph):	16.77 0.00 5/ SSW	
4.	Receiving Data:		
	Sample Location pH Temperature (C)  Receiving Water N/M N/M		
5.	Land Observations, as "Yes" or "No", for reporting r	nonth:	
	Visual Observations	<u>Effluent</u>	Receiving Water
	Floating and Suspended Materials of Waste Origin Odor Discoloration and Turbidity Evidence of Beneficial Water Use	No Not Required Not Required	No No No No
6.	Comments:		
7.	I certify that the information in this report, to the best Operator Signature:	t of my knowledge, i  Date: 07-3	

#### Self-Monitoring Report LLNL Treatment Facility B (TFB) AREA TFB

1. Reporting Period: Business Month June Year 2015

2. Dates (in **bold** and <u>underline</u>) treated ground water was discharged

May June 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30

Total monthly time facility operated (hours): 779

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y):	06-01-2015
Influent pH:	7.5
Effluent pH:	<u>7.5</u>
Effluent Temperature (°C):	<u>19.3</u>

4. Wellfield Data:

	Monthly	Instantaneous
Source	Volume(gal)	Flow Rate(gpm)
W-357	353,800	7.7
W-610	312,844	6.8
W-620	234,826	5.3
W-621	0	0.0
W-655	0	0.0
W-704	797,520	17.4
W-1423	127,848	2.2
W-2501	749,114	16.4
W-2502	175,394	3.4
Total:	2,751,346	59.2

5. Discharge Information:

Discharge Location	Receiving Water Station	Volume
West Perimeter Drainage Channel	TFB-R002	1,615,927
<b>Building 133 Cooling Tower</b>	TFB-E-B133	CT1,135,419

6. Comments:

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

# Self-Monitoring Report (cont'd) LLNL Treatment Facility B (TFB) AREA TFB

Operator Signature: Soll Carry C. Date: 07-01-2015

# Land Observation Report date: TFB-R002 - West Perimeter Drainage Channel

1.	Reporting Period: Business Month June Year 2015	<u>-</u>	
2.	Date compliance sampling performed <u>06-01-2015</u>		
3.	Weather Conditions:		
	Average air tempertaure (°C): 6-day total precipitation (in): Average wind speed/direction (mph):	15.61 0.00 7/ WSW	
4.	Receiving Data:		
	Sample Location pH Temperature (C) Receiving Water N/M N/M		
5.	Land Observations, as "Yes" or "No", for reporting n	nonth:	
	Visual Observations	<u>Effluent</u>	Receiving Water
	Floating and Suspended Materials of Waste Origin Odor Discoloration and Turbidity Evidence of Beneficial Water Use	No Not Required Not Required	<u>No</u> <u>No</u> <u>No</u> <u>No</u>
6.	Comments:		
7.	I certify that the information in this report, to the best Operator Signature:	t of my knowledge, i	

#### Self-Monitoring Report LLNL Treatment Facility C (TFC) AREA TFC

1. Reporting Period: Business Month April Year 2015

2. Dates (in **bold** and <u>underline</u>) treated ground water was discharged

April 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30

Total monthly time facility operated (hours): 728

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y):	04-02-2015
Influent pH:	7.5
Effluent pH:	<u>7.5</u>
Effluent Temperature (°C):	20

4. Wellfield Data:

Source	Monthly Volume(gal)	Instantaneous Flow Rate(gpm)
W-701	565,688	13.2
W-1104	1,186,752	27.0
W-1116	0	0.0
Total:	1,752,440	40.2

5. Discharge Information:

	Receiving	
Discharge Location	Water Station	Volume
Arroyo Las Positas	TFC-R003	1,752,440

6. Comments:

Ion exchange resin columns removed from treatment system on 4-1-15 due to conclusion of wet season.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:

Date: 05-01-2015

# Land Observation Report date: TFC-R003 - Arroyo Las Positas

1. Reporting Period: Business Month April Year 2015

2.	Date compliance sampling performed <u>04-02-2015</u>		
3.	Weather Conditions:		
	Average air tempertaure (°C): 6-day total precipitation (in): Average wind speed/direction (mph):	14.75 0.00 5/ SSW	
4.	Receiving Data:		
	Sample Location pH Temperature (C)  Receiving Water N/M N/M		
5.	Land Observations, as "Yes" or "No", for reporting n	nonth:	
	Visual Observations	<u>Effluent</u>	Receiving Water
	Floating and Suspended Materials of Waste Origin Odor Discoloration and Turbidity Evidence of Beneficial Water Use	No Not Required Not Required	<u>No</u> <u>No</u> <u>No</u> <u>No</u>
6.	Comments:		
7.	I certify that the information in this report, to the best Operator Signature:	t of my knowledge, in the control of	s true and correct. 2-2015

#### **Self-Monitoring Report** LLNL Treatment Facility C (TFC) AREA TFC

1. Reporting Period: Business Month May Year 2015 2. Dates (in **bold** and underline ) treated ground water was discharged May 
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 Total monthly time facility operated (hours): 707 3. Monthly Compliance Data: Date compliance sampling performed (m/d/y): 05-04-2015 Influent pH: Effluent pH: Effluent Temperature (°C): 4. Wellfield Data: Monthly Instantaneous Source Volume(gal) Flow Rate(gpm) 547,904 W-701 13.1 W-1104 834,656 27.5 W-1116 66 0.0 Total: 1,382,626 40.6 5. Discharge Information: Receiving Discharge Location Water Station Volume Arroyo Las Positas TFC-R003 1,382,626 6. Comments: 7. I certify that the information in this report, to the best of my knowledge, is true and correct. Date: 06-01-2015

Operator Signature:

# Land Observation Report date: TFC-R003 - Arroyo Las Positas

1. Reporting Period: Business Month May Year 2015

2.	Date compliance sampling performed <u>05-04-2015</u>		
3.	Weather Conditions:		
	Average air tempertaure (°C): 6-day total precipitation (in): Average wind speed/direction (mph):	16.77 0.00 5/ SSW	
4.	Receiving Data:		
	Sample Location pH Temperature (C)  Receiving Water N/M N/M		
5.	Land Observations, as "Yes" or "No", for reporting n	nonth:	
	Visual Observations	Effluent	Receiving Water
	Floating and Suspended Materials of Waste Origin Odor Discoloration and Turbidity Evidence of Beneficial Water Use	No Not Required Not Required	<u>No</u> <u>No</u> <u>No</u> <u>No</u> <u>No</u>
6.	Comments:		
7.	I certify that the information in this report, to the best Operator Signature:	t of my knowledge, is  Date: 07-31	

# Self-Monitoring Report LLNL Treatment Facility C (TFC) AREA TFC

1. Reporting Period: Business Month <u>June</u> Year <u>2015</u>						
2. Dates (in bole	d and <u>underline</u> )	treated ground wa	nter was discharg	ged		
May June	30     31       01     02     03     04       16     17     18     19	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	$\frac{2}{7}$ $\frac{13}{28}$ $\frac{14}{29}$ $\frac{15}{30}$		
Total month	ly time facility ope	erated (hours):	777			
3. Monthly Com	pliance Data:					
Influent pH: Effluent pH:	Date compliance sampling performed (m/d/y):  Influent pH:  Effluent pH:  T.5  Effluent Temperature (°C):  20.8					
4. Wellfield Data	a:					
Source	Monthly Volume(gal)	Instantaneous Flow Rate(gpm)				
W-701 W-1104 W-1116	603,528 1,218,896 31,450	13.1 26.0 1.5				
Total:	1,853,874	40.6				
	5. Discharge Information:  Receiving  Discharge Location  Water Station  Volume					
Arroyo	Las Positas		TFC-R003	1,853,874		
6. Comments:						
Carren C.						
7. I certify that the information in this report, to the best of my knowledge, is true and correct.						
		V				

# Land Observation Report date: TFC-R003 - Arroyo Las Positas

1. Reporting Period: Business Month June Year 2015

2.	Date compliance sampling performed <u>06-01-2015</u>		
3.	Weather Conditions:		
	Average air tempertaure (°C): 6-day total precipitation (in): Average wind speed/direction (mph):	15.61 0.00 7/ WSW	
4.	Receiving Data:		
	Sample Location pH Temperature (C) Receiving Water N/M N/M		
5.	Land Observations, as "Yes" or "No", for reporting n	nonth:	9
	Visual Observations	<u>Effluent</u>	Receiving Water
	Floating and Suspended Materials of Waste Origin Odor Discoloration and Turbidity Evidence of Beneficial Water Use	No Not Required Not Required	<u>No</u> <u>No</u> <u>No</u> <u>No</u>
6.	Comments:		
7.	I certify that the information in this report, to the bes  Operator Signature:    Source   So	7	

#### Self-Monitoring Report LLNL Mini Treatment Unit 1 (MTU1) AREA TFC-E

1. Reporting Period: Business Month April Year 2015

2. Dates (in **bold** and <u>underline</u>) treated ground water was discharged

April 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30

Total monthly time facility operated (hours): 720

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y):	04-09-2015
Influent pH:	7.5
Effluent pH:	7.5
Effluent Temperature (°C):	20.1

4. Wellfield Data:

Source	Monthly Volume(gal)	Instantaneous Flow Rate(gpm)
<u>Source</u>	Volume(gar)	110 W Italia (Spini)
W-368	181,444	4.3
W-413	631,051	14.9
Total:	812,495	19.2

5. Discharge Information:

	Receiving			
Discharge Location	Water Station	Volume		
Arroyo Las Positas	TFC-R003	812,495		

6. Comments:

The resin columns were removed from the facility at 13:24 on 4-1-15.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Date: 05-14-2015

#### Self-Monitoring Report LLNL Mini Treatment Unit 1 (MTU1) AREA TFC-E

1. Reporting Period: Business Month May Year 2015

2. Dates (in **bold** and <u>underline</u>) treated ground water was discharged

May 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29

Total monthly time facility operated (hours): 695

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y):	05-13-2015
Influent pH:	7.4
Effluent pH:	7.5
Effluent Temperature (°C):	<u>19.5</u>

4. Wellfield Data:

Source	Monthly Volume(gal)	Instantaneous Flow Rate(gpm)
W-368	160,374	3.8
W-413	567,568	13.5
Total:	727,942	17.3

5. Discharge Information:

	Receiving		
Discharge Location	Water Station	Volume	
Arrovo Las Positas	TFC-R003	727.942	

6. Comments:

Facility was shutdown at 08:35 on 05-20-2015 to download latest strategy, conduct control system field test and conduct interlock checks. Facility was restarted at 12:00 on 05-20-2015.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Date: 06-04-2015

# Self-Monitoring Report LLNL Mini Treatment Unit 1 (MTU1) AREA TFC-E

1. Reporting Per	1. Reporting Period: Business Month <u>June</u> Year <u>2015</u>					
2. Dates (in bol	d and underline )	treated ground wa	ater was discharge	d		
May June	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$					
Total month	aly time facility ope	rated (hours):	768			
3. Monthly Com	pliance Data:					
Date compliance sampling performed (m/d/y): 06-17-2015 Influent pH: 7.5 Effluent pH: 7.5 Effluent Temperature (°C): 21.3						
4. Wellfield Dat	a:					
Source	Monthly Volume(gal)	Instantaneous Flow Rate(gpm)	1			
W-368 W-413	165,520 598,326	3.5 12.9				
Total:	763,846	16.4				
5. Discharge Inf			Receiving			
Discharge	Location		Water Station	Volume		
Arroyo Las Positas TFC-R003 763,846						
<ol> <li>Comments:         Additional gallons were added to the well volumes due to the fact that the TFRT numbers are inaccurate because of a power outage that occurred at B543.     </li> </ol>						
7. I certify that t	he information in th	nis report, to the b	est of my knowled	dge, is true and correct.		
Operator Signatu	Operator Signature: Bolle Kulu Date: 07-24-2015					

### Self-Monitoring Report LLNL Portable Treatment Unit 1 (PTU1) AREA TFC-SE

1. Reporting Period	: Business Mon	th April	Year <u><b>2015</b></u>			
2. Dates (in <b>bold</b> ar	nd <u>underline</u> )	treated ground	l water was o	lischarge	i	
April <u>01</u> <u>16</u>	<u>02</u> <u>03</u> <u>04</u> <u>17</u> <u>18</u> <u>19</u>	$\frac{05}{20}  \frac{06}{21}  \frac{07}{22}$	$\frac{08}{23}  \frac{09}{24}  \frac{10}{25}$	$\frac{11}{26} \frac{12}{27}$	$\frac{13}{28} \frac{14}{29} \frac{15}{30}$	
Total monthly t	ime facility ope	erated (hours):	<u>_730</u>			
3. Monthly Complia	ance Data:					
Influent pH: Effluent pH:	•					
4. Wellfield Data:						
Source	Monthly Volume(gal)	Instantaneou Flow Rate(g)				
W-1213 W-2201	86,166 201,005	1.9 10.0				
Total:	287,171	11.9				
5. Discharge Inform	nation:		D!-:!	1		
Discharge Lo	cation		Receivi Water S		Volume	
Arroyo Las	s Positas		_TFC-	R003	287,171	
6. Comments:  Removed ion exchange resin columns from treatment system on 4-1-15 due to conclusion of wet season. Started W-2201 on 4-16-15.						
7. I certify that the i	nformation in t		he best of my	y knowlec	lge, is true and co	orrect.
Operator Signature:	She	Cawasa	- h	Date: 05	5-01- <u>2015</u>	

# Self-Monitoring Report LLNL Portable Treatment Unit 1 (PTU1) AREA TFC-SE

1. Reporting Per	1. Reporting Period: Business Month <u>May</u> Year <u>2015</u>								
2. Dates (in bole	d and <u>underline</u> )	treated ground wa	ter was discharge	ed					
May	01     02     03     04       16     17     18     19	$     \begin{array}{c cccccccccccccccccccccccccccccccc$	$\frac{09}{24}  \frac{10}{25}  \frac{11}{26}  \frac{12}{27}$	$\frac{13}{28} \frac{14}{29} \frac{15}{29}$					
Total monthly time facility operated (hours): 665									
3. Monthly Com	pliance Data:								
Date compliance sampling performed (m/d/y):  Influent pH:  Effluent pH:  Effluent Temperature (°C):  05-04-2015  7.0  7.5  20.3									
4. Wellfield Data	1.								
Source	Monthly Volume(gal)	Instantaneous Flow Rate(gpm)		3					
W-1213 W-2201	79,400 399,421	2.1 10.3							
Total:	478,821	<u>12.4</u>							
5. Discharge Info	ormation:								
Discharge	Location		Receiving Water Station	Volume					
Arroyo Las Positas TFC-R003 478,821									
6. Comments: Facility was shutdown on 05-18-2015 due to high air stripper level fault. Facility was restarted on 05-18-2015. Facility was shutdown on 05-19-2015 due to high air stripper level fault. Facility was restarted on 05-19-2015.									
7. I certify that the information in this report, to the best of my knowledge, is true and correct.									
Operator Signatu	Operator Signature: Sky Guvaeu C. Date: 06-01-2015								

# Self-Monitoring Report LLNL Portable Treatment Unit 1 (PTU1) AREA TFC-SE

1. Reporting Per	iod: Business Mon	th <u>June</u> Year	r <u>2015</u>						
2. Dates (in bold	d and <u>underline</u> )	treated ground wa	ter was discharg	ged					
May June	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	$\frac{2}{7} \frac{13}{28} \frac{14}{29} \frac{15}{30}$					
Total monthly time facility operated (hours):771									
3. Monthly Com	3. Monthly Compliance Data:								
Date compliance sampling performed (m/d/y):  Influent pH:  Effluent pH:  Effluent Temperature (°C):  06-01-2015  7.5  21.2									
4. Wellfield Data	a:								
Source	Monthly Volume(gal)	Instantaneous Flow Rate(gpm)							
W-1213 W-2201	89,107 464,566	2.0 10.1							
Total:	553,673	<u>12.1</u>							
5. Discharge Info	ormation:		Receiving						
Discharge	Location		Water Station	Volume					
Arroyo	Arroyo Las Positas TFC-R003 553,673								
6. Comments:									
7. I certify that the information in this report, to the best of my knowledge, is true and correct.  Operator Signature:  Date: 07-01-2015									

#### Self-Monitoring Report LLNL Treatment Facility D (TFD) AREA TFD

1. Reporting Period: Business Month April Year 2015

2. Dates (in bold and underline ) treated ground water was discharged

April 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27

Total monthly time facility operated (hours): <u>645</u>

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y):	04-08-2015
Influent pH:	<u>7.0</u>
Effluent pH:	<u>7.0</u>
Effluent Temperature (°C):	21.4

4. Wellfield Data:

	Monthly	Instantaneous
Source	Volume(gal)	Flow Rate(gpm)
W-351	45,197	1.2
W-653	2,372	3.0
W-2011	4,743	3.0
W-2101	6,185	3.0
W-2102	11,143	3.0
W-1206	491,419	12.7
W-1208	767,719	22.1
Total:	1,328,778	48.0

5. Discharge Information:

Discharge Location	Receiving Water Station	Volume
Arroyo Las Positas	TFC-R003	1,328,778
TFD irrigation supply	TFD-IRR	_0

6. Comments:

Facility was shutdown on 04-23-2015. Facility was restarted on 04-24-2015. Facility was shutdown on 04-27-2015 for REVAL.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:

Date: 04-30-2015

#### Self-Monitoring Report LLNL Treatment Facility D (TFD) AREA TFD

- 1. Reporting Period: Business Month May Year 2015
- 2. Dates (in **bold** and <u>underline</u>) treated ground water was discharged

April	28	29	30												
May	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15
0.73	16	17	18	19	20	21	22	23	24	25	26	27	28		

Total monthly time facility operated (hours): \_0

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): Not Measured

Influent pH:

Effluent pH:

Effluent Temperature (°C):

4. Wellfield Data:

Source	Monthly Volume(gal)	Instantaneous Flow Rate(gpm)
W-351	0	0.0
W-653	0	0.0
W-2011	0	0.0
W-2101	0	0.0
W-2102	0	0.0
W-1208	0	0.0
W-1206	0	0.0
Total:	<u>0</u>	0.0

5. Discharge Information:

Discharge Location	Receiving Water Station	Volume
Arroyo Las Positas	TFC-R003	_0
TFD irrigation supply	TFD-IRR	_0

6. Comments:

Facility was shutdown on 04-27-2015 for REVAL.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Date: 05-29-2015

#### Self-Monitoring Report LLNL Treatment Facility D (TFD) AREA TFD

- 1. Reporting Period: Business Month June Year 2015
- 2. Dates (in **bold** and <u>underline</u>) treated ground water was discharged

May	29	30	31												
June	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15
	16	17	18	19	20	21	22	23	24	25	26	27	28	29	

Total monthly time facility operated (hours): \_0

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): Not Measured

Influent pH:

Effluent pH:

Effluent Temperature (°C):

4. Wellfield Data:

	Monthly	Instantaneous
Source	Volume(gal)	Flow Rate(gpm)
W-351	0	0.0
W-653	0	0.0
W-2011	0	0.0
W-2101	0	0.0
W-2102	0	0.0
W-1206	0	0.0
W-1208	0	0.0
Total:	<u>0</u>	0.0

5. Discharge Information:

TS: 1	Receiving		
Discharge Location	Water Station	Volume	
Arroyo Las Positas	TFC-R003	_0	
TFD irrigation supply	TFD-IRR	_0	

6. Comments:

Facility was shutdown on 04-27-2015 for REVAL.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Date: 06-30-2015

#### Self-Monitoring Report LLNL Portable Treatment Unit 8 (PTU8) AREA TFD-E

1. Reporting Period: Business Month April Year 2015

2. Dates (in **bold** and <u>underline</u>) treated ground water was discharged

April 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30

Total monthly time facility operated (hours): <u>649</u>

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y):	<u>04-08-2015</u>
Influent pH:	<u>7.0</u>
Effluent pH:	<u>7.5</u>
Effluent Temperature (°C):	<u>18.7</u>

4. Wellfield Data:

Source	Monthly Volume(gal)	Instantaneous Flow Rate(gpm)	
W-2006	489	0.0	
W-1301	23,989	1.0	
W-1303	37,843	1.0	
W-1306	2,968	0.0	
W-1307	205,246	5.0	
W-1550	6,321	0.2	
W-2203	2,955	0.0	
Total:	279,811	7.2	

5. Discharge Information:

Arroyo Las Positas	TFC-R003	279,811
Discharge Location	Receiving Water Station	Volume

6. Comments:

Facility was shutdown on 04-22-2015. Facility was restarted on 04-23-2015. Facility was shutdown on 04-23-2015. Facility was restarted on 04-24-2015. Facility was shutdown on 04-25-2015. Facility was restarted on 04-27-2015.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Date: 05-01-2015

#### Self-Monitoring Report LLNL Portable Treatment Unit 8 (PTU8) AREA TFD-E

1. Reporting Period: Business Month <u>May</u> Year <u>2015</u>

2. Dates (in **bold** and <u>underline</u>) treated ground water was discharged

May 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29

Total monthly time facility operated (hours): <u>566</u>

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y):	05-01-2015
Influent pH:	7.0
Effluent pH:	7.5
Effluent Temperature (°C):	22.3

4. Wellfield Data:

Source	Monthly Volume(gal)	Instantaneous Flow Rate(gpm)
W-2006	708	0.0
W-1301	24,813	0.6
W-1306	3,564	0.0
W-1307	206,441	6.0
W-1550	5,786	0.2
W-2203	3,155	0.0
W-1303	39,680	0.9
Total:	284,147	7.7

5. Discharge Information:

	Receiving	
Discharge Location	Water Station	Volume
Arroyo Las Positas	TFC-R003	284,147

6. Comments:

Facility was shutdown on 05-02-2015. Facility was restarted on 05-04-2015. Facility was shutdown on 05-16-2015. Facility was restarted on 05-19-2015. Facility was restarted on 05-20-2015.

7. I certify that the info	rmation in th	is report, to the b	est of my knowledge, is true and correct.
		1 Govagus C	
Operator Signature:	SEM	1 you down -	Date: 06-01-2015

#### Self-Monitoring Report LLNL Portable Treatment Unit 8 (PTU8) AREA TFD-E

1. Reporting Period: Business Month June Year 2015

2. Dates (in **bold** and underline ) treated ground water was discharged

May June 30 31 / 02 03 04 05 06 07 08 09 10 11 12 13 14 15 / 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30

Total monthly time facility operated (hours): 760

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y):	06-02-2015
Influent pH:	7.5
Effluent pH:	7.5
Effluent Temperature (°C):	20.3

4. Wellfield Data:

	Monthly	Instantaneous
Source	Volume(gal)	Flow Rate(gpm)
W-2006	887	1.2
W-1301	31,926	0.7
W-1303	56,426	1.2
W-1306	4,759	1.6
W-1307	284,990	5.8
W-1550	7,530	1.1
W-2203	3,737	1.4
Total:	390,255	12.9

5. Discharge Information:

Discharge Location	Water Station	Volume
Arroyo Las Positas	TFC-R003 39	

#### 6. Comments:

The facility was down for several hours due to a frozen discharge back pressure valve (6-4 and 6-9). Additional gallons were added to the well volumes due to the fact that the TFRT numbers are inaccurate because of a power outage that occurred at B543.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

# Self-Monitoring Report (cont'd) LLNL Portable Treatment Unit 8 (PTU8) AREA TFD-E

Operator Signature:	Bulletin	Date: 07-24-2015
1	11/00	

# Self-Monitoring Report LLNL Portable Treatment Unit 10 (PTU10) AREA TFD-HPD

	ou. Dusiness wion	th April Yea	ar <u>2015</u>			
2. Dates (in <b>bold</b> and <u>underline</u> ) treated ground water was discharged						
April	01 02 03 04 16 17 18 19	$     \begin{array}{c cccccccccccccccccccccccccccccccc$	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	$\frac{13}{28} \frac{14}{29} \frac{15}{30}$		
Total monthly	Total monthly time facility operated (hours): 725					
3. Monthly Comp	oliance Data:					
Date compliance sampling performed (m/d/y):  Influent pH:  Effluent pH:  Effluent Temperature (°C):  04-09-2015  7.5  7.5  18.1						
4. Wellfield Data	:					
Source	Monthly Volume(gal)	Instantaneous Flow Rate(gpm)	)			
W-1254	166,095	3.5				
<b>W-1254</b> Total:	166,095 166,095	3.5 3.5				
	166,095					
Total:	166,095		Receiving Water Station	<u>Volume</u>		
Total:  5. Discharge Info <u>Discharge I</u>	166,095			Volume 166,095		
Total:  5. Discharge Info <u>Discharge I</u>	166,095 rmation: Location		Water Station	3		

# Self-Monitoring Report LLNL Portable Treatment Unit 10 (PTU10) AREA TFD-HPD

1. Reporting Perio	1. Reporting Period: Business Month May Year 2015				
2. Dates (in <b>bold</b> and <u>underline</u> ) treated ground water was discharged					
May <u>1</u>	$     \begin{array}{c cccccccccccccccccccccccccccccccc$	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	$\frac{09}{24}  \frac{10}{25}  \frac{11}{26}  \frac{12}{27}$	$\frac{13}{28} \frac{14}{29} \frac{15}{29}$	
Total monthly	y time facility ope	erated (hours): _	<u>707</u>		
3. Monthly Comp	liance Data:				
Date compliance sampling performed (m/d/y): 05-07-2015 Influent pH: 7.5 Effluent pH: 7.5 Effluent Temperature (°C): 19.2					
4. Wellfield Data:					
Source	Monthly Volume(gal)	Instantaneous Flow Rate(gpm)			
W-1254	279,920	5.9			
Total:	279,920	<u>5.9</u>	***************************************		
5. Discharge Infor	rmation:		Receiving		
Discharge I	_ocation		Water Station	Volume	
Arroyo L	as Positas		TFC-R003	279,920	
6. Comments: NA					
7. I certify that the information in this report, to the best of my knowledge, is true and correct					
Operator Signature: Bull Date: 06-04-2015					

# Self-Monitoring Report LLNL Portable Treatment Unit 10 (PTU10) AREA TFD-HPD

1. Reporting Period	: Business Mon	th June	Year 2	2015			
2. Dates (in <b>bold</b> a	nd <u>underline</u> )	treated groun	nd wate	r was d	ischarged	i	
May 30 June 01 16	0 31 02 03 04 1 17 18 19	$\frac{05}{20} \frac{06}{21} \frac{07}{22}$	08 0 23 2	09 <u>10</u> <u>25</u>	11 12 26 27	13 14 28 29	15 30
Total monthly	time facility ope	erated (hours)	: _77	<u>'1</u>			
3. Monthly Compli	ance Data:						
Date compliand Influent pH: Effluent pH: Effluent Tempe	ce sampling perferature (°C):	formed (m/d/	y):	<u>06-16-2</u>	2015 7.5 7.5 22.3		
4. Wellfield Data:							
Source	Monthly Volume(gal)	Instantaneo Flow Rate(					
W-1254	289,188	7.	0				
Total:	289,188	7.	0				
5. Discharge Inform	nation:		_				
Discharge Location			Receivii Water S	_	Volum	<u>ne</u>	
Arroyo La	s Positas		-	TFC-	R003	289,1	<u>88</u>
6. Comments: NA							
7. I certify that the i	DAA 1	his report, to	the bes	et of my		ge, is true	and correct

#### Self-Monitoring Report LLNL ISB01 (ISB01) AREA TFD-HPD

1. Reporting Period: Business Month April Year 2015

2. Dates (in **bold** and <u>underline</u>) treated ground water was discharged

April 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30

Total monthly time facility operated (hours): 628

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): Not Measured

Influent pH:

Effluent pH:

Effluent Temperature (°C):

4. Wellfield Data:

Source	Monthly Volume(gal)	Instantaneous Flow Rate(gpm)
W-1650	870	1.6
W-1653	678	2.0
W-1655	47	0.8
W-1657	0	0.0
Total:	1,595	4.5

5. Discharge Information:

	Receiving	
Discharge Location	Water Station	Volume
ISB01 injection well	_W-1552	1,595

#### 6. Comments:

Compliance sampling is not required at this facility due to the fact that ISB01 is a closed loop system, and water is not discharged to the environment. Water was circulated through the system but was not treated. Approximately 126 gallons of facility water were added to the pre-mixing tote on 4-20-15. The facility was down for approximately 64 hours for a variety of reasons: a new facility controller needed to be tested, facility preparation for Ethyl Lactate injection, Ethyl Lactate injection, filling of the pre-mixing tote with facility water, facility preparation for sampling, and facility sampling.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

# Self-Monitoring Report (cont'd) LLNL ISB01 (ISB01) AREA TFD-HPD

Operator Signature: Date: 05-14-2015

#### Self-Monitoring Report LLNL ISB01 (ISB01) AREA TFD-HPD

1. Reporting Period: Business Month May Year 2015

2. Dates (in bold and underline ) treated ground water was discharged

May 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29

Total monthly time facility operated (hours): \_\_71

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): Not Measured

Influent pH:

Effluent pH:

Effluent Temperature (°C):

4. Wellfield Data:

Source	Monthly Volume(gal)	Instantaneous Flow Rate(gpm)
W-1650	351	1.6
W-1653	242	2.5
W-1655	52	1.2
W-1657	0	0.0
Total:	645	5.4

5. Discharge Information:

	Receiving	
Discharge Location	Water Station	Volume
ISB01 injection well	W-1552	_645

#### 6. Comments:

Compliance sampling is not required at this facility due to the fact that ISB01 is a closed loop system, and water is not discharged to the environment. Water was circulated through the system but was not treated. Approximately 156 gallons of facility water were added to the pre-mixing tote on 5-29-15. During this period of time the facility did not operate. The facility did not operate for most of the month due to numerous LSHH interlock alarm activations at W-1552. The facility did not operate until the cause for the shutdowns was determined and the problem resolved.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

# Self-Monitoring Report (cont'd) LLNL ISB01 (ISB01) AREA TFD-HPD

Operator Signature: Butter Date: 06-25-2015

#### Self-Monitoring Report LLNL ISB01 (ISB01) AREA TFD-HPD

1. Reporting Period: Business Month June Year 2015

2. Dates (in **bold** and <u>underline</u>) treated ground water was discharged

May 30 31 June 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30

Total monthly time facility operated (hours): 603

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): Not Measured

Influent pH:

Effluent pH:

Effluent Temperature (°C):

4. Wellfield Data:

Source	Monthly Volume(gal)	Instantaneous Flow Rate(gpm)
W-1650	809	2.2
W-1653	615	2.1
W-1655	71	1.1
W-1657	0	0.0
Total:	1,495	5.4

5. Discharge Information:

	Receiving	
Discharge Location	Water Station	Volume
ISB01 injection well	W-1552	1,495

#### 6. Comments:

Compliance sampling is not required at this facility due to the fact that ISB01 is a closed loop system, and water is not discharged to the environment. Water was circulated through the system but was not treated. Approximately 115 gallons of facility water were added to the pre-mixing tote on 6-18-15. Approximately 78 gallons of facility water were added to the pre-mixing tote on 6-29-15. During this period of time the facility did not operate. The facility was down for several days while maintenance work was being performed at W-1552. The facility was also down for several hours during the Ethyl Lactate injection process. The volume totals are calculations based on the meter readings at each well. The TFRT numbers are inaccurate due to a power outage at B543.

# Self-Monitoring Report (cont'd) LLNL ISB01 (ISB01) AREA TFD-HPD

7. I certify that the information in this report, to the be	est of my knowledge, is true and correct.
Operator Signature: Bully Ruld	Date: <u>07-24-2015</u>

#### Self-Monitoring Report LLNL Portable Treatment Unit 2 (PTU2) AREA TFD-S

1. Reporting Period: Business Month April Year 2015

2. Dates (in **bold** and <u>underline</u>) treated ground water was discharged

April 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30

Total monthly time facility operated (hours): 720

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y):	04-08-2015
Influent pH:	<u>7.0</u>
Effluent pH:	<u>7.0</u>
Effluent Temperature (°C):	<u>21.6</u>

4. Wellfield Data:

Source	Monthly Volume(gal)	Instantaneous Flow Rate(gpm)
W-1503	488,674	11.3
W-1504	283,053	6.5
W-1510	89,949	2.1
W-2601	181,761	4.1
Total:	1,043,437	24.0

5. Discharge Information:

	Receiving	
Discharge Location	Water Station	Volume
Arroyo Las Positas	TFC-R003	1,043,437

6. Comments:

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Date: 05-01-2015

### Self-Monitoring Report LLNL Portable Treatment Unit 2 (PTU2) AREA TFD-S

1. Reporting Period: Business Month May Year 2015

2. Dates (in **bold** and <u>underline</u>) treated ground water was discharged

May 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29

Total monthly time facility operated (hours): 696

3. Monthly Compliance Data:

Date compliance sampling performed $(m/d/y)$ :	<u>05-08-2015</u>
Influent pH:	<u>7.0</u>
Effluent pH:	<u>7.0</u>
Effluent Temperature (°C):	22.3

4. Wellfield Data:

Source	Monthly Volume(gal)	Instantaneous Flow Rate(gpm)
W-1503	472,757	11.3
W-1504	276,167	6.6
W-1510	81,733	1.9
W-2601	171,212	4.0
Total:	1,001,869	23.8

5. Discharge Information:

Discharge Location	Water Station Volum	
Arroyo Las Positas	TFC-R003	1,001,869

6. Comments:

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Date: 06-02-2015

### Self-Monitoring Report LLNL Portable Treatment Unit 2 (PTU2) AREA TFD-S

1. Reporting Period: Business Month June Year 2015

2. Dates (in **bold** and <u>underline</u>) treated ground water was discharged

May June 30 31 7 8 9 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30

Total monthly time facility operated (hours): 676

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y):	06-12-2015
Influent pH:	<u>7.0</u>
Effluent pH:	7.0
Effluent Temperature (°C):	24.6

4. Wellfield Data:

Source	Monthly Volume(gal)	Instantaneous Flow Rate(gpm)
W-1503	458,746	11.4
W-1504	271,878	6.7
W-1510	85,740	2.1
W-2601	180,952	4.0
Total:	997,316	24.2

5. Discharge Information:

	Receiving	
Discharge Location	Water Station	<u>Volume</u>
Arroyo Las Positas	TFC-R003	997,316

6. Comments:

Facility was shutdown on 06-26-2015 due to W-2601 flow meter failure. Facility was restarted on 06-30-2015.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Date: 07-17-2015

### Self-Monitoring Report LLNL Portable Treatment Unit 11 (PTU11) AREA TFD-SE

1. Reporting Period: Business Month April Year 2015

2. Dates (in **bold** and <u>underline</u>) treated ground water was discharged

April 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30

Total monthly time facility operated (hours): 720

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y):	<u>04-01-2015</u>
Influent pH:	<u>7.0</u>
Effluent pH:	<u>7.0</u>
Effluent Temperature (°C):	20.5

4. Wellfield Data:

Source	Monthly Volume(gal)	Instantaneous Flow Rate(gpm)
W-314	176,727	4.2
W-2005	34,147	0.8
W-1308	39,401	1.0
W-1904	0	0.0
W-1403	39,027	0.9
SIP-ETC-201	. 0	0.0
Total:	289,302	6.8

5. Discharge Information:

	Receiving	
Discharge Location	Water Station	Volume
Arroyo Las Positas	TFC-R003	289,302

6. Comments:

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:

Date: 05-06-2015

### Self-Monitoring Report LLNL Portable Treatment Unit 11 (PTU11) AREA TFD-SE

1. Reporting Period: Business Month May Year 2015

2. Dates (in **bold** and <u>underline</u>) treated ground water was discharged

May 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28

Total monthly time facility operated (hours): <u>584</u>

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y):	<u>05-04-2015</u>
Influent pH:	8.0
Effluent pH:	8.0
Effluent Temperature (°C):	20.2

4. Wellfield Data:

Source	Monthly Volume(gal)	Instantaneous Flow Rate(gpm)
W-314	149,895	4.2
W-2005	31,246	0.9
W-1308	38,721	1.0
W-1403	34,979	0.9
W-1904	0	0.0
SIP-ETC-201	. 0	0.0
Total:	254,841	7.1

5. Discharge Information:

	Receiving		
Discharge Location	Water Station	Volume	
Arroyo Las Positas	TFC-R003	254,841	

6. Comments:

Facility was shutdown on 05-16-2015 at 07:25 due to unplanned power outage. Facility was restarted on 05-18-2015 at 13:30. Facility was shutdown on 05-26-2015 at 19:45 due to stripper high level alarm. Facility was restarted on 05-27-2015 at 15:00.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:

Date: 06-03-2015

### Self-Monitoring Report LLNL Portable Treatment Unit 11 (PTU11) AREA TFD-SE

1. Reporting Period: Business Month <u>June</u> Year <u>2015</u>

2. Dates (in **bold** and <u>underline</u>) treated ground water was discharged

Total monthly time facility operated (hours): 792

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y):	06-02-2015
Influent pH:	8.0
Effluent pH:	8.0
Effluent Temperature (°C):	21

4. Wellfield Data:

	Monthly	Instantaneous
Source	Volume(gal)	Flow Rate(gpm)
W-314	200,739	4.1
W-2005	38,015	0.8
W-1308	62,156	1.2
W-1403	49,347	0.9
W-1904	0	0.0
SIP-ETC-201	0	0.0
Total:	350,257	7.1

5. Discharge Information:

	Receiving	
Discharge Location	Water Station	<u>Volume</u>
Arroyo Las Positas	TFC-R003	350,257

6. Comments:

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: \_\_\_\_\_\_ Date: 07-13-2015

### Self-Monitoring Report LLNL Portable Treatment Unit 12 (PTU12) AREA TFD-SS

1. Reporting Period: Business Month April Year 2015

2. Dates (in **bold** and <u>underline</u>) treated ground water was discharged

April 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30

Total monthly time facility operated (hours): 720

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y):	04-01-2015
Influent pH:	<u>7.0</u>
Effluent pH:	<b>7.0</b>
Effluent Temperature (°C):	20.4

4. Wellfield Data:

Source	Monthly Volume(gal)	Instantaneous Flow Rate(gpm)
W-1523	193,307	4.5
W-1601	34,050	0.8
W-1602	88,930	2.1
W-1603	469,188	10.3
Total:	785,475	17.7

5. Discharge Information:

Discharge Location	Water Station	Volume
Arroyo Las Positas	TFC-R003	785,475

6. Comments:

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Date: 05-01-2015

### Self-Monitoring Report LLNL Portable Treatment Unit 12 (PTU12) AREA TFD-SS

1. Reporting Period: Business Month May Year 2015

2. Dates (in **bold** and <u>underline</u>) treated ground water was discharged

May 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29

Total monthly time facility operated (hours): 647

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y):	<u>05-21-2015</u>
Influent pH:	7.0
Effluent pH:	<u>7.0</u>
Effluent Temperature (°C):	20.9

4. Wellfield Data:

Source	Monthly <u>Volume(gal)</u>	Instantaneous Flow Rate(gpm)
W-1523	177,097	4.7
W-1601	32,666	0.8
W-1602	84,456	2.4
W-1603	531,216	13.9
Total:	825,435	21.8

5. Discharge Information:

Discharge Location	Water Station Volum	
Arroyo Las Positas	TFC-R003	825,435

6. Comments:

System secure from 5/16/15 to 5/18/15 due to power outage.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Date: 06-02-2015

### Self-Monitoring Report LLNL Portable Treatment Unit 12 (PTU12) AREA TFD-SS

- 1. Reporting Period: Business Month June Year 2015
- 2. Dates (in **bold** and <u>underline</u>) treated ground water was discharged

May June 30 31 7 18 19 20 21 22 23 24 25 26 27 28 29 30

Total monthly time facility operated (hours): 617

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y):	06-05-2015
Influent pH:	<u>7.0</u>
Effluent pH:	<u>7.0</u>
Effluent Temperature (°C):	26.2

4. Wellfield Data:

Source	Monthly Volume(gal)	Instantaneous Flow Rate(gpm)
W-1523	177,993	4.6
W-1601	32,624	0.8
W-1602	83,189	2.5
W-1603	514,936	13.9
Total:	808,742	21.8

5. Discharge Information:

	Receiving		
Discharge Location	Water Station	Volume	
Arrovo Las Positas	TFC-R003	808,742	

6. Comments:

Facility was shutdown on 06-11-2015 to replace blower motor. Facility was restarted on 06-17-2015.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Date: 07-10-2015

#### Self-Monitoring Report LLNL Portable Treatment Unit 6 (PTU6) AREA TFD-W

1. Reporting Period: Business Month April Year 2015

2. Dates (in **bold** and underline ) treated ground water was discharged

April 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30

Total monthly time facility operated (hours): 671

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y):	04-08-2015
Influent pH:	<u>7.5</u>
Effluent pH:	<u>7.5</u>
Effluent Temperature (°C):	20.1

4. Wellfield Data:

Source	Monthly Volume(gal)	Instantaneous Flow Rate(gpm)
W-1215	405,067	10.2
W-1216	402,307	10.0
W-1902	599,506	15.1
Total:	1,406,880	35.3

5. Discharge Information:

	Receiving	
Discharge Location	Water Station	Volume
Arrovo Las Positas	TFC-R003	1,406,880

6. Comments:

Facility was restarted at 13:44 on 04-02-2015 after the leak at the discharge pump was fixed. Facility shutdown at 04:13 on 04-24-2015 due to a power glitch. Facility was restarted at 10:09 on 04-24-2015.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Date: 05-14-2015

### Self-Monitoring Report LLNL Portable Treatment Unit 6 (PTU6) AREA TFD-W

1. Reporting Period: Business Month May Year 2015 2. Dates (in **bold** and underline ) treated ground water was discharged <u>01</u> <u>02</u> <u>03</u> <u>04</u> <u>05</u> <u>06</u> <u>07</u> <u>08</u> <u>09</u> <u>10</u> <u>11</u> <u>12</u> <u>13</u> <u>14</u> <u>15</u> May <u>16 17 18 19 20 21 22 23 24 25 26 27 28 29</u> Total monthly time facility operated (hours): 703 3. Monthly Compliance Data: Date compliance sampling performed (m/d/y): 05-07-2015 Influent pH: Effluent pH: Effluent Temperature (°C): 19.6 4. Wellfield Data: Monthly Instantaneous Volume(gal) Flow Rate(gpm) Source 10.0 W-1215 417,358 419,680 W-1216 10.1 W-1902 628,425 15.1 35.2 Total: 1,465,463 5. Discharge Information: Receiving Water Station Discharge Location Volume Arroyo Las Positas TFC-R003 1,465,463 6. Comments: NA 7. I certify that the information in this report, to the best of my knowledge, is true and correct. \_\_\_\_ Date: 06-04-2015

### Self-Monitoring Report LLNL Portable Treatment Unit 6 (PTU6) AREA TFD-W

1. Reporting Period: Business Month June Year 2015 2. Dates (in **bold** and underline ) treated ground water was discharged May 30 31 June <u>16 17 18 19 20 21 22 23 24 25 26 27 28 29 30</u> Total monthly time facility operated (hours): 747 3. Monthly Compliance Data: Date compliance sampling performed (m/d/y): 06-16-2015 Influent pH: Effluent pH: Effluent Temperature (°C): 4. Wellfield Data: Monthly Instantaneous Volume(gal) Source Flow Rate(gpm) 436,635 W-1215 11.0 455,664 W-1216 10.1 W-1902 666,555 15.2 Total: 1,558,854 <u>36.3</u> 5. Discharge Information: Receiving Discharge Location Water Station Volume Arroyo Las Positas TFC-R003 1,558,854 6. Comments: Facility was shutdown on 06-10-2015. Facility was restarted on 06-11-2015. 7. I certify that the information in this report, to the best of my knowledge, is true and correct. Operator Signature: \_\_\_ Date: 07-01-2015

### Self-Monitoring Report LLNL Vapor Extraction System 11 (VES11) AREA VTFD-ETCS

1. Reporting Period: Business Month April Year 2015

2. Dates (in **bold** and <u>underline</u>) treatment facility operated

April 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30

3. Wellfield Data:

	Monthly	Instantaneous			Hours
Source	Volume(cu. ft)	Flow Rate(scfm)	<u>P(in. Hg)</u>	$T(^{o}F)$	of Op.
W-1904	70	0.0	0	0	0
W-ETC-2003	497,530	10.7	73	68	727
SIP-ETC-201	14	0.0	0	0	0
W-ETC-20041	B 715,454	19.0	-3.72	68	727
W-ETC-2004	A 132,009	3.0	-4.13	68	727
Total:	1,345,077	32.8			

#### 4. Comments:

Quarterly vapor samples collected from operating and idle extraction wells 4-29-15.

5. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Date: 05-07-2015

### Self-Monitoring Report LLNL Vapor Extraction System 11 (VES11) AREA VTFD-ETCS

- 1. Reporting Period: Business Month May Year 2015
- 2. Dates (in **bold** and <u>underline</u>) treatment facility operated

May <u>01 02 03 04 05 06 07 08 09 10 11 12 13 14 15</u> <u>16 17 18 19 20 21 22 23 24 25 26 27 28 14 15</u>

#### 3. Wellfield Data:

ľ	Monthly	Instantaneous			Hours
Source	Volume(cu. ft)	Flow Rate(scfm)	P(in. Hg)	<u>T(°F)</u>	of Op.
W-1904	0	0.0	0	0	0
W-ETC-2003	318,884	7.9	62	61	624
W-ETC-2004A	49,551	1.9	-3.06	61	624
W-ETC-2004E	627,162	15.7	-2.71	61	624
SIP-ETC-201	0	0.0	0	0	0
Total:	995,597	25.5			

#### 4. Comments:

Facility was shutdown on 05-16-2015 at 07:25 due to unplanned power outage. Facility was restarted on 05-18-2015 at 11:40. Monthly volumes and hours of operation entered on this report have been amended due to totalizers incrementing while facility offline.

5. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Date: 06-04-2015

### Self-Monitoring Report LLNL Vapor Extraction System 11 (VES11) AREA VTFD-ETCS

- 1. Reporting Period: Business Month <u>June</u> Year <u>2015</u>
- 2. Dates (in **bold** and <u>underline</u>) treatment facility operated

#### 3. Wellfield Data:

1	Monthly	Instantaneous			Hours
Source	Volume(cu. ft	) Flow Rate(scfm)	P(in. Hg)	T(°F)	of Op.
W-1904	0	0.0	0	0	0
W-ETC-2003	354,606	8.2	56	70	798
W-ETC-2004	A 65,007	1.6	-2.57	70	798
W-ETC-20041	3 561,258	8.5	-1.21	70	798
SIP-ETC-201	0	0.0	0	0	0
Total:	980,871	18.3			

#### 4. Comments:

VES 11 system vacuum adjusted to -23 inHg. 6-11-15 to mitigate the loss operating liquid relative to high ambient temperatures.

5. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Am Thoma Date: 07-13-2015

### Self-Monitoring Report LLNL Portable Treatment Unit 3 (PTU3) AREA TFE-E

1. Reporting Period: Business Month April Year 2015

2. Dates (in **bold** and <u>underline</u>) treated ground water was discharged

April 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30

Total monthly time facility operated (hours): 732

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y):	04-02-2015
Influent pH:	7.0
Effluent pH:	7.0
Effluent Temperature (°C):	20.2

4. Wellfield Data:

Source	Monthly Volume(gal)	Instantaneous Flow Rate(gpm)
W-566	334,024	7.6
W-1109	51,479	1.2
W-1903	6,528	0.2
W-1909	0	0.0
W-2305	0	0.0
Total:	392,031	9.0

5. Discharge Information:

	Receiving	
Discharge Location	Water Station	Volume
Arroyo Las Positas	TFC-R003	392,031

6. Comments:

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Date: 05-06-2015

### Self-Monitoring Report LLNL Portable Treatment Unit 3 (PTU3) AREA TFE-E

1. Reporting Period: Business Month May Year 2015

2. Dates (in **bold** and <u>underline</u>) treated ground water was discharged

May <u>01 02 03 04 05 06 07 08 09 10 11 12 13 14 15</u> <u>16 17 18 19 20 21 22 23 24 25 26 27 28</u>

Total monthly time facility operated (hours): 682

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y):	05-04-2015
Influent pH:	7.0
Effluent pH:	$\overline{7.0}$
Effluent Temperature (°C):	<u>19.6</u>

4. Wellfield Data:

Source	Monthly Volume(gal)	Instantaneous Flow Rate(gpm)
W-566	313,612	7.8
W-1109	45,085	1.1
W-1903	5,579	0.2
W-1909	0	0.0
W-2305	0	0.0
Total:	364,276	9.1

5. Discharge Information:

	Receiving	
Discharge Location	Water Station	Volume
Arroyo Las Positas	TFC-R003	364,276

6. Comments:

7. I certify that the information in this report, to the best of my	knowledge, is true and correct
	8 ,
Operator Signature: Monu	Date: 06-03-2015

### Self-Monitoring Report LLNL Portable Treatment Unit 3 (PTU3) AREA TFE-E

- 1. Reporting Period: Business Month June Year 2015
- 2. Dates (in **bold** and <u>underline</u>) treated ground water was discharged

Total monthly time facility operated (hours): 751

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y):	06-02-2015
Influent pH:	7.0
Effluent pH:	7.0
Effluent Temperature (°C):	20.9

4. Wellfield Data:

Source	Monthly <u>Volume(gal)</u>	Instantaneous Flow Rate(gpm)
W-566	340,940	7.8
W-1109	49,533	1.1
W-1903	4,146	0.1
W-1909	0	0.0
W-2305	0	0.0
Total:	394,619	9.0

5. Discharge Information:

	Receiving		
Discharge Location	Water Station Volu		
Arroyo Las Positas	TFC-R003	394,619	

6. Comments:

Facility was shutdown on 06-12-2015 for a planned power outage. Facility was restarted on 06-15-2015 at 15:37.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Date: 07-13-2015

### Self-Monitoring Report LLNL GAC Treatment Unit 07 (GTU07) AREA TFE-HS

1. Reporting Period: Business Month April Year 2015

2. Dates (in **bold** and <u>underline</u>) treated ground water was discharged

April 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30

Total monthly time facility operated (hours): 724

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y):	04-01-2015
Influent pH:	7.0
Effluent pH:	7.0
Effluent Temperature (°C):	18.8

4. Wellfield Data:

Source	Monthly Volume(gal)	Instantaneous Flow Rate(gpm)
W-2105	763	0.2
W-2801	39,859	0.9
Total:	40,622	1.2

5. Discharge Information:

Discharge Location	Receiving Water Station	J		
Arroyo Las Positas	TFC-R003	40,622		

6. Comments:

Facility shutdown 4-8-15 at 11:50 due to W-2801 low flow interlock. Facility was restarted 4-8-15 at 17:02. Facility shutdown 4-14-15 at 04:20 due to W-2801 low flow interlock. Facility was restarted at 07:55.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Date: 05-06-2015

# Self-Monitoring Report LLNL GAC Treatment Unit 07 (GTU07) AREA TFE-HS

1. Reporting Period	: Business Mon	th <u>May</u> Ye	ar <u>2015</u>	
2. Dates (in <b>bold</b> ar	nd <u>underline</u> )	treated ground v	ater was discharg	ed
May <u>01</u> <u>16</u>	$\frac{02}{17} \frac{03}{18} \frac{04}{19}$	$\frac{05}{20}$ $\frac{06}{21}$ $\frac{07}{22}$ $\frac{08}{23}$	$\frac{09}{24}  \frac{10}{25}  \frac{11}{26}  \frac{12}{25}$	$\frac{2}{7} \frac{13}{28} \frac{14}{28} \frac{15}{28}$
Total monthly to	ime facility ope	rated (hours):	679	
3. Monthly Complia	ince Data:			
Date compliance Influent pH: Effluent pH: Effluent Temper		formed (m/d/y):	05-04-2015 7.0 7.0 24.5	
4. Wellfield Data:				
Source	Monthly Volume(gal)	Instantaneous Flow Rate(gpm	<u>)</u>	
W-2105 W-2801	704 35,204	0.2 0.8		
Total:	35,908	1.0		
5. Discharge Informa	ation:			
Discharge Loc	cation		Receiving Water Station	Volume
Arroyo Las	Positas		TFC-R003	35,908
6. Comments:				
7. I certify that the in	nformation in th	nis report, to the	best of my knowle	edge, is true and correct

## Self-Monitoring Report LLNL GAC Treatment Unit 07 (GTU07) AREA TFE-HS

1. Reporting Per	iod: Business Mon	th <u>June</u> Year	<u>2015</u>	
2. Dates (in bole	d and <u>underline</u> )	treated ground wa	ter was dischar	rged
May June	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	$     \begin{array}{c cccccccccccccccccccccccccccccccc$	09 10 11 24 25 26	$\frac{12}{27}$ $\frac{13}{28}$ $\frac{14}{29}$ $\frac{15}{30}$
Total month	ly time facility ope	rated (hours):{	<u>806</u>	
3. Monthly Com	pliance Data:			
Influent pH: Effluent pH:	ance sampling perf	formed (m/d/y):	$\begin{array}{r} \underline{05\text{-}29\text{-}2015} \\ \underline{7.0} \\ \underline{7.0} \\ \underline{20.4} \end{array}$	
4. Wellfield Data	1:			
Source	Monthly Volume(gal)	Instantaneous Flow Rate(gpm)		
W-2105 W-2801	631 40,413	0.2 0.8		
Total:	41,044	1.0		
5. Discharge Info	ormation:		D	
Discharge	Location		Receiving Water Station	Volume
Arroyo l	Las Positas		TFC-R003	41,044
6. Comments:				
7. I certify that th	$\sim$	is report, to the be	est of my know	ledge, is true and correct

## Self-Monitoring Report LLNL Portable Treatment Unit 9 (PTU9) AREA TFE-NW

1. Reporting Period	od: Business Mon	th <u>April</u> Yea	r <u>2015</u>	
2. Dates (in bold	and <u>underline</u> )	treated ground wa	ter was discharge	d
April <u> </u>	01     02     03     04       16     17     18     19	$     \begin{array}{c cccc}                                 $	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	$\frac{13}{28} \frac{14}{29} \frac{15}{30}$
Total monthly	y time facility ope	erated (hours):	<u>726</u>	
3. Monthly Comp	oliance Data:			
Influent pH: Effluent pH:	nce sampling perf	Formed (m/d/y):	$\begin{array}{r} \underline{04\text{-}08\text{-}2015} \\ \underline{7.0} \\ \underline{7.0} \\ \underline{22.4} \end{array}$	
4. Wellfield Data:	:			
Source	Monthly Volume(gal)	Instantaneous Flow Rate(gpm)		
W-1211 W-1409	283,488 73,348	6.7 1.7		
Total:	356,836	<u>8.4</u>		
5. Discharge Info	rmation:			
Discharge I	Location		Receiving Water Station	Volume
Arroyo L	as Positas		TFC-R003	356,836
6. Comments:				
7. I certify that the Operator Signatur	1/- //	///	est of my knowled	dge, is true and correct

# Self-Monitoring Report LLNL Portable Treatment Unit 9 (PTU9) AREA TFE-NW

1. Reporting Period:	Business Mon	nth <u>May</u> Y	ear <u>2015</u>		
2. Dates (in <b>bold</b> ar	ıd <u>underline</u> )	treated ground	water was discharg	ed	
May <u>01</u> <u>16</u>	02 03 04 17 18 19	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	$\frac{08}{23}  \frac{09}{24}  \frac{10}{25}  \frac{11}{26}  \frac{12}{25}$	$\frac{2}{7} \frac{13}{28} \frac{14}{29} \frac{15}{29}$	
Total monthly ti	me facility ope	erated (hours):	<u>710</u>		
3. Monthly Complia	nce Data:				
Influent pH: Effluent pH:	•				
4. Wellfield Data:					
Source	Monthly Volume(gal)	Instantaneous Flow Rate(gp			
W-1211 W-1409	270,385 70,414	6.4 1.7			
Total:	340,799	<u>8.1</u>			
5. Discharge Information	ation:		Receiving		
Discharge Loc	cation		Water Station	<u>Volume</u>	
Arroyo Las	Positas		TFC-R003	340,799	
6. Comments:					
7. I certify that the information in this report, to the best of my knowledge, is true and correct.  Operator Signature:  Date: 06-03-2015					

## Self-Monitoring Report LLNL Portable Treatment Unit 9 (PTU9) AREA TFE-NW

1. Reporting Per	iod: Business Mon	th <u>June</u> Y	ear <u>2015</u>		
2. Dates (in bole	d and <u>underline</u> )	treated ground	water was disch	arged	
May June	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	$\frac{05}{20}  \frac{06}{21}  \frac{07}{22}  \frac{0}{2}$	8 09 10 11 3 24 25 26	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	-
Total month	ly time facility ope	rated (hours):	<u>781</u>		
3. Monthly Com	pliance Data:				
Influent pH: Effluent pH:	ance sampling perf	formed (m/d/y):	$   \begin{array}{r}     \underline{05-30-2015} \\     \underline{7.0} \\     \underline{7.0} \\     \underline{22.1}   \end{array} $		
4. Wellfield Data	a:				
Source	Monthly Volume(gal)	Instantaneous Flow Rate(gp)	<u>m)</u>		
W-1211 W-1409	296,335 76,436	6.4 1.6			
Total:	372,771	8.0			
5. Discharge Info			Receiving Water Statio	<u>n Volume</u>	
Arroyo	Las Positas		TFC-R00	372,771	
6. Comments:					
7. I certify that the Operator Signature	ne information in the	//	e best of my kno		ıd correct

# Self-Monitoring Report LLNL Mini Treatment Unit 04 (MTU04) AREA TFE-SE

1. Reporting Perio	od: Business Mor	th <u>April</u> Yea	ar <u>2015</u>	
2. Dates (in bold	and <u>underline</u> )	treated ground wa	ater was discharge	d
April (	$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	$\frac{13}{28} \frac{14}{29} \frac{15}{30}$
Total monthly	y time facility ope	erated (hours):	717	
3. Monthly Comp	liance Data:			
Influent pH: Effluent pH:	nce sampling per perature (°C):	formed (m/d/y):	$   \begin{array}{r}     \underline{04-01-2015} \\     \underline{7.0} \\     \underline{7.0} \\     \underline{20.5}   \end{array} $	
4. Wellfield Data:				
Source	Monthly Volume(gal)	Instantaneous Flow Rate(gpm)	1	
W-359	362,793	8.4		
Total:	362,793	8.4		
5. Discharge Info	rmation:			
Discharge I	_ocation	21	Receiving Water Station	Volume
Arroyo L	as Positas		TFC-R003	362,793
6. Comments:				
7. I certify that the	e information in t	his report, to the b	est of my knowled	dge, is true and correc
Operator Signatur	e: Dame	Mana	Date: 05	5-07-2015

## Self-Monitoring Report LLNL Mini Treatment Unit 04 (MTU04) AREA TFE-SE

1. Reporting Period	: Business Mon	th <u>May</u>	Year <u>201</u> :	<u>5</u>		
2. Dates (in <b>bold</b> and <u>underline</u> ) treated ground water was discharged						
May <u>01</u> <u>16</u>	$\frac{02}{17} \frac{03}{18} \frac{04}{19}$	$\frac{05}{20}  \frac{06}{21}  \frac{07}{22}$	$\frac{08}{23} \frac{09}{24}$	$\frac{10}{25}$ $\frac{11}{26}$ $\frac{12}{27}$	13 14 15 28	
Total monthly t	time facility ope	rated (hours)	: <u>668</u>			
3. Monthly Complia	ance Data:					
Date compliand Influent pH: Effluent pH: Effluent Tempe	ce sampling perferature (°C):	formed (m/d/	y): <u>05-</u>	7.0 7.0 20.1		
4. Wellfield Data:				at		
Source	Monthly Volume(gal)	Instantaneous Flow Rate(g				
W-359	337,961	8.4	ŀ			
Total:	337,961	8.4	<u>i</u>			
5. Discharge Inform	nation:					
Discharge Lo	cation			eiving ter Station	Volume	
Arroyo La	s Positas		_T	FC-R003	_337,961	
	shutdown on 05 ity was restarted				m interlock	
7. I certify that the i	nformation in th	nis report, to	the best of	f my knowle	dge, is true and	correct
Operator Signature:	Sams	Them		Date: <u>0</u>	<u>6-03-2015</u>	

# Self-Monitoring Report LLNL Mini Treatment Unit 04 (MTU04) AREA TFE-SE

1. Reporting Per	riod: Business Mon	th <u>June</u> Yea	ar <u>2015</u>	
2. Dates (in bol	d and underline )	treated ground w	ater was discharge	ed
May June	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	$     \begin{array}{c cccccccccccccccccccccccccccccccc$	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$
Total month	ly time facility ope	erated (hours):	783	
3. Monthly Com	pliance Data:			
Influent pH: Effluent pH:		Formed (m/d/y):	$\begin{array}{r} \underline{06-02-2015} \\ \underline{7.0} \\ \underline{7.0} \\ \underline{21} \end{array}$	
4. Wellfield Data	a:			
Source	Monthly Volume(gal)	Instantaneous Flow Rate(gpm	)	
W-359	396,235	8.4		
Total:	396,235	8.4	<del></del>	
5. Discharge Info	ormation:		Dagaissina	
Discharge	Location		Receiving Water Station	Volume
Arroyo	Las Positas		TFC-R003	396,235
6. Comments:				
7. I certify that the Operator Signature	ne information in th	nis report, to the t	Dest of my knowled	dge, is true and correct

### Self-Monitoring Report LLNL Mini Treatment Unit 03 (MTU03) AREA TFE-SW

1. Reporting Period: Business Month April Year 2015

2. Dates (in **bold** and <u>underline</u>) treated ground water was discharged

April 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30

Total monthly time facility operated (hours): 720

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y):	04-08-2015
Influent pH:	7.5
Effluent pH:	7.5
Effluent Temperature (°C):	19.2

4. Wellfield Data:

Source	Monthly Volume(gal)	Instantaneous Flow Rate(gpm)
W-1516	453,534	10.5
W-1518	0	0.0
W-1520	31,691	0.7
W-1522	32,207	0.8
Total:	517,432	12.0

5. Discharge Information:

	Receiving	
Discharge Location	Water Station	Volume
Arrovo Las Positas	TFC-R003	517.432

6. Comments:

NA

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Date: 05-14-2015

### Self-Monitoring Report LLNL Mini Treatment Unit 03 (MTU03) AREA TFE-SW

1. Reporting Period: Business Month May Year 2015

2. Dates (in **bold** and <u>underline</u>) treated ground water was discharged

May 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29

Total monthly time facility operated (hours): 692

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y):	05-07-2015
Influent pH:	7.5
Effluent pH:	7.5
Effluent Temperature (°C):	19.9

4. Wellfield Data:

	Monthly	Instantaneous
Source	Volume(gal)	Flow Rate(gpm)
W-1516	434,996	10.6
W-1518	0	0.0
W-1520	30,114	0.7
W-1522	32,392	0.8
Total:	497,502	12.0

5. Discharge Information:

	Receiving	
Discharge Location	Water Station	Volume
Arroyo Las Positas	TFC-R003	497,502

6. Comments:

Facility was shutdown at 8:52 on 05-28-2015 for CSFT /Interlock Checks. Facility was restarted at 15:28 on 05-28-2015.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Date: 06-04-2015

### Self-Monitoring Report LLNL Mini Treatment Unit 03 (MTU03) AREA TFE-SW

1. Reporting Period: Business Month <u>June</u> Year <u>2015</u>

2. Dates (in **bold** and <u>underline</u>) treated ground water was discharged

Total monthly time facility operated (hours): 709

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y):	<u>06-16-2015</u>
Influent pH:	<u>7.5</u>
Effluent pH:	<u>7.5</u>
Effluent Temperature (°C):	20.4

4. Wellfield Data:

Source	Monthly Volume(gal)	Instantaneous Flow Rate(gpm)
W-1516	446,036	10.1
W-1518	0	0.0
W-1520	33,141	0.8
W-1522	43,231	1.1
Total:	522,408	12.0

5. Discharge Information:

	Receiving	
Discharge Location	Water Station	Volume
Arroyo Las Positas	TFC-R003	522,408

#### 6. Comments:

Facility shutdown at 16:19 on 06-08-2015 due to RIO Brain failure. Facility was restarted at 14:01 on 06-09-2015. Facility shutdown at 08:22 on 06-15-2015 due to low flow at W-1615. Facility was restarted at 12:53 on 06-15-2015. W-1520 and W-1522 were down for approximately 10 hours on 6-17-15. Facility shutdown at 07:23 on 06-22-2015 at W-1516 due to problem with RIO Brain. Facility was restarted at 13:56 on 06-23-2015. Facility shutdown at 06:44 on 06-30-2015 due to W-1516 low flow. Facility was restarted at 09:10 on 06-30-2015. Additional gallons were added to the well volumes due to the fact that the TFRT numbers are inaccurate because of a power outage that occurred at B543.

## Self-Monitoring Report (cont'd) LLNL Mini Treatment Unit 03 (MTU03) AREA TFE-SW

7. I certify that the information in this report, to the best of my	knowledge, is true and correct.
Operator Signature: Blood Add	Date: 07-24-2015

## Self-Monitoring Report LLNL Mini Treatment Unit 05 (MTU05) AREA TFE-W

1. Reporting Period	l: Business Mor	nth April	Year <u>2015</u>			
2. Dates (in <b>bold</b> a	2. Dates (in <b>bold</b> and <u>underline</u> ) treated ground water was discharged					
April <u>0</u>	$\frac{1}{6}$ $\frac{02}{17}$ $\frac{03}{18}$ $\frac{04}{19}$	$\frac{05}{20} \frac{06}{21} \frac{07}{22}$	08     09     10     11     12       23     24     25     26     27	$\frac{13}{28} \frac{14}{29} \frac{15}{30}$		
Total monthly	time facility ope	erated (hours):	720			
3. Monthly Compli	ance Data:					
Date compliance sampling performed (m/d/y):  Influent pH:  Effluent pH:  T.5  Effluent Temperature (°C):  20.4						
4. Wellfield Data:						
Source	Monthly Volume(gal)	Instantaneous Flow Rate(g				
W-292 W-305	261,270 519,916	6.1 12.0				
Total:	781,186	18.1				
5. Discharge Inform	nation:		Receiving			
Discharge Lo	ocation		Water Station	Volume		
Arroyo La	s Positas		TFC-R003	781,186		
6. Comments: NA						
7. I certify that the information in this report, to the best of my knowledge, is true and correct.						
Operator Signature	Belly	Add	Date: 0	5-14-2015		

### Self-Monitoring Report LLNL Mini Treatment Unit 05 (MTU05) AREA TFE-W

- 1. Reporting Period: Business Month May Year 2015
- 2. Dates (in **bold** and <u>underline</u>) treated ground water was discharged

May 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29

Total monthly time facility operated (hours): 602

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y):	05-13-2015
Influent pH:	<u>7.5</u>
Effluent pH:	7.5
Effluent Temperature (°C):	20.3

4. Wellfield Data:

Source	Monthly Volume(gal)	Instantaneous Flow Rate(gpm)		
W-292	217,303	6.1		
W-305	431,531	12.1		
Total:	648,834	18.2		

5. Discharge Information:

	Receiving	
Discharge Location	Water Station	Volume
Arroyo Las Positas	TFC-R003	648,834

Receiving

6. Comments:

Facility was shutdown at 8:48 on 05-15-2015 for strategy update CSFT and interlock checks. Facility was restarted at 14:21 on 05-15-2015. Facility was shutdown at 15:40 on 05-26-2015 for air stripper maintenance. Facility was restarted at 14:16 on 05-29-2015.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Date: 06-04-2015

### Self-Monitoring Report LLNL Mini Treatment Unit 05 (MTU05) AREA TFE-W

1. Reporting Period: Business Month June Year 2015

2. Dates (in **bold** and <u>underline</u>) treated ground water was discharged

Total monthly time facility operated (hours): 764

3. Monthly Compliance Data:

4. Wellfield Data:

Source	Monthly Volume(gal)	Instantaneous Flow Rate(gpm)		
W-292	278,719	6.1		
W-305	467,630	12.1		
Total:	746,349	18.2		

5. Discharge Information:

Discharge Location Receiving
Water Station Volume

Arroyo Las Positas TFC-R003 746,349

6. Comments:

Facility was shutdown at 10:25 on 06-08-2015 for W-305 flowmeter maintenance work. Facility was restarted at 14:16 on 06-08-2015. The flow rate at W-305 was erratic many times during the month. W-305 shut down several times during the month due to low flow. Repair/maintenance work continued on the W-305 flow meter.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Date: 07-24-2015

### Self-Monitoring Report LLNL Vapor Extraction System 16 (VES16) AREA VTFE-ELM

- 1. Reporting Period: Business Month April Year 2015
- 2. Dates (in bold and underline ) treatment facility operated

April 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30

3. Wellfield Data:

	Monthly	Instantaneous			Hours
Source	Volume(cu. ft)	Flow Rate(scfm)	P(in. Hg)	T(°F)	of Op.
W-1903	139,780	3.3	-22.6	74	721
W-1909	0	0.0	0	0	0
W-2305	0	0.0	0	0	0
W-543-001	16	0.0	0	0	0
W-543-003	89,798	2.0	15	74	721
W-543-1908	18	0.0	0	0	0
Total:	229,612	5.4			

#### 4. Comments:

Vapor samples collected from idle and operating extraction wells 4-29-15.

5. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Date: 05-06-2015

### Self-Monitoring Report LLNL Vapor Extraction System 16 (VES16) AREA VTFE-ELM

- 1. Reporting Period: Business Month May Year 2015
- 2. Dates (in **bold** and <u>underline</u>) treatment facility operated

May 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28

3. Wellfield Data:

	Monthly	Instantaneous			Hours
Source	Volume(cu. ft	Flow Rate(scfm)	P(in. Hg)	<u>T(°F)</u>	of Op.
W-1903	135,160	3.2	-22.55	72	672
W-1909	0	0.0	0	0	0
W-2305	0	0.0	0	0	0
W-543-001	0	0.0	0	0	0
W-543-003	83,500	2.1	02	72	672
W-543-1908	0	0.0	0	0	0
Total:	218,660	5.3			TO STATE OF

4. Comments:

5. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Moma Date: 06-03-2015

### Self-Monitoring Report LLNL Vapor Extraction System 16 (VES16) AREA VTFE-ELM

- 1. Reporting Period: Business Month <u>June</u> Year <u>2015</u>
- 2. Dates (in **bold** and <u>underline</u>) treatment facility operated

3. Wellfield Data:

	Monthly	Instantaneous			Hours	
Source	Volume(cu. ft)	Flow Rate(scfm)	P(in. Hg)	<u>T(°F)</u>	of Op.	
W-1903	146,180	3.8	-21.96	70	720	
W-1909	0	0.0	0	0	0	
W-2305	0	0.0	0	0	0	
W-543-001	0	0.0	0	0	0	
W-543-003	89,538	2.1	02	70	720	
W-543-1908	0	0.0	0	0	0	
Total:	235,718	6.0				

4. Comments:

Facility was shutdown on 06-12-2015 for planned power outage. Facility was restarted on 06-16-2015.

5. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Date: 07-13-2015

#### Self-Monitoring Report LLNL Vapor Extraction System 12 (VES12) AREA VTFE-HS

- 1. Reporting Period: Business Month April Year 2015
- 2. Dates (in **bold** and <u>underline</u>) treatment facility operated

April 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30

3. Wellfield Data:

N	Monthly	Instantaneous			Hours
Source Y	/olume(cu.ft	) Flow Rate(scfm)	P(in. Hg)	<u>T(°F)</u>	of Op.
W-2105	66,262	1.6	-15.17	58	728
W-ETS-2008A	. 0	0.0	0	0	0
W-ETS-2008B	771,214	17.2	-15.2	58	728
W-ETS-2009	0	0.0	0	0	0
W-ETS-2010A	. 0	0.0	0	0	0
W-ETS-2010B	0	0.0	0	0	0
Total:	837,476	18.8			

4. Comments:

5. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: \_\_\_\_\_\_ Date: 05-06-2015

#### Self-Monitoring Report LLNL Vapor Extraction System 12 (VES12) AREA VTFE-HS

- 1. Reporting Period: Business Month <u>May</u> Year <u>2015</u>
- 2. Dates (in **bold** and <u>underline</u>) treatment facility operated

May <u>01 02 03 04 05 06 07 08 09 10 11 12 13 14 15</u> <u>16 17 18 19 20 21 22 23 24 25 26 27 28</u>

3. Wellfield Data:

	Monthly	Instantaneous			Hours
Source	Volume(cu. ft)	Flow Rate(scfm)	P(in. Hg)	<u>T(°F)</u>	of Op.
W-2105	63,078	1.6	-16.1	60	672
W-ETS-2008	A 16	0.0	0	0	0
W-ETS-2008	B 706,838	17.1	-15.47	60	672
W-ETS-2009	30	0.0	0	0	1
W-ETS-2010	A 10	0.0	0	0	0
W-ETS-2010	B 13	0.0	0	0	0
Total:	769,985	18.7			

4. Comments:

5.	I certify that	at the information	in this report	to the be	est of my	knowledge, i	s true and	correct
			· A /	7				

Operator Signature: Date: 06-03-2015

#### Self-Monitoring Report LLNL Vapor Extraction System 12 (VES12) AREA VTFE-HS

- 1. Reporting Period: Business Month June Year 2015
- 2. Dates (in **bold** and <u>underline</u>) treatment facility operated

3. Wellfield Data:

	Monthly	Instantaneous			Hours
Source	Volume(cu. ft	Flow Rate(scfm)	P(in. Hg)	T(°F)	of Op.
W-2105	62,711	1.3	-12.64	58	805
W-ETS-2008	<b>A</b> 0	0.0	0	0	0
W-ETS-2008I	8 683,462	11.0	-12.55	58	805
W-ETS-2009	0	0.0	0	0	0
W-ETS-2010A	A 0	0.0	0	0	0
W-ETS-2010I	3 0	0.0	0	0	0
Total:	746,173	12.3			

#### 4. Comments:

Condensate transfer pump lost prime causing facility to shutdown 6-30-15. Facility was restarted at 13:40.

5. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: \_\_\_\_\_\_\_ Date: 07-15-2015

## Self-Monitoring Report LLNL GAC Treatment Unit 01 (GTU01) AREA TFG-1

1. Reporting Per	iod: Business Mon	th <u>April</u> Yea	r <u>2015</u>	
2. Dates (in bold	and <u>underline</u> )	treated ground wa	ter was discharged	
April	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	$\frac{13}{28} \frac{14}{29} \frac{15}{30}$
Total month	ly time facility ope	erated (hours):	<u>697</u>	
3. Monthly Compliance Data:				
Influent pH: Effluent pH:	ance sampling perf	formed (m/d/y):	$   \begin{array}{r}     \underline{04-15-2015} \\     \underline{7.0} \\     \underline{7.0} \\     \underline{20.3}   \end{array} $	
4. Wellfield Data	ı:			
Source	Monthly Volume(gal)	Instantaneous Flow Rate(gpm)		
W-1111	146,848	3.5		
Total:	146,848	<u>3.5</u>	<del></del>	
5. Discharge Info	ormation:		D 11	
Discharge	Location		Receiving Water Station	Volume
Arroyo	Seco		TFG-ASW	146,848
6. Comments:				
7. I certify that the	Wast 1		est of my knowled; Date: 05.	ge, is true and correct01-2015

## Self-Monitoring Report LLNL GAC Treatment Unit 01 (GTU01) AREA TFG-1

1. Reporting Per	riod: Business Mon	th <u>May</u> Year	r <u>2015</u>	
2. Dates (in bol	ld and <u>underline</u> )	treated ground wa	ater was discharge	d
May	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	$     \begin{array}{c cccccccccccccccccccccccccccccccc$	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	$\frac{13}{28} \frac{14}{29} \frac{15}{29}$
Total month	nly time facility ope	rated (hours):	696	
3. Monthly Compliance Data:				
Influent pH Effluent pH		ormed (m/d/y):	$   \begin{array}{r}     \underline{05-01-2015} \\     \underline{7.0} \\     \underline{7.0} \\     \underline{21.7}   \end{array} $	
4. Wellfield Dat	a:			
Source	Monthly Volume(gal)	Instantaneous Flow Rate(gpm)		
W-1111	148,168	3.6		
Total:	148,168	3.6		
5. Discharge Inf	ormation:			
Discharge	Location		Receiving Water Station	Volume
Arroyo	Seco		TFG-ASW	148,168
6. Comments:				
7. I certify that the Operator Signature	1/2 //	is report, to the b	est of my knowled Date: <u>06</u>	ge, is true and correct

## Self-Monitoring Report LLNL GAC Treatment Unit 01 (GTU01) AREA TFG-1

1. Reporting Period: Business Month <u>June</u> Year <u>2015</u>				
2. Dates (in <b>bold</b> and <u>underline</u> ) treated ground water was discharged				
May June $\frac{30}{01} \frac{31}{02} \frac{03}{18} \frac{04}{19} \frac{05}{20} \frac{06}{21} \frac{07}{22} \frac{08}{23} \frac{09}{24} \frac{10}{25} \frac{11}{26} \frac{12}{27} \frac{13}{28} \frac{14}{29} \frac{15}{30}$				
Total monthly time facility operated (hours): <u>768</u>				
3. Monthly Compliance Data:				
Date compliance sampling performed (m/d/y): $05-30-2015$ Influent pH: $7.0$ Effluent pH: $7.0$ Effluent Temperature (°C): $21.8$				
4. Wellfield Data:				
Monthly Instantaneous  Source Volume(gal) Flow Rate(gpm)				
W-1111 143,066 3.0				
Total: <u>143,066</u> <u>3.0</u>				
5. Discharge Information:				
<u>Discharge Location</u> Receiving <u>Water Station</u> <u>Volume</u>				
Arroyo Seco TFG-ASW 143,066				
6. Comments:				
7. I certify that the information in this report, to the best of my knowledge, is true and correct Operator Signature Date: <u>07-10-2015</u>				

# Land Observation Report date: TFG-ASW - Arroyo Seco

	Reporting Feriod. Business Month April 1 ear 2013		
2.	Date compliance sampling performed <u>04-15-2015</u>		
3.	Weather Conditions:		
	Average air tempertaure (°C): 6-day total precipitation (in): Average wind speed/direction (mph):	13.48 0.00 5/ SSE	
4.	Receiving Data:		
5.	Sample Location pH Temperature (C)  Receiving Water N/M N/M  Land Observations, as "Yes" or "No", for reporting relations of the second	n anthu	
5.	Land Observations, as Tes of No , for reporting f	nontn:	
	Visual Observations	<u>Effluent</u>	Receiving Water
	Floating and Suspended Materials of Waste Origin	No	<u>No</u>
	Odor Discoloration and Turbidity Evidence of Beneficial Water Use	Not Required Not Required	<u>No</u> <u>No</u> <u>N/A</u>
6.	Odor Discoloration and Turbidity	Not Required	<u>No</u> <u>No</u> <u>N/A</u>

# Land Observation Report date: TFG-ASW - Arroyo Seco

1.	Reporting Period: Business Month May Year 2015	_	
2.	Date compliance sampling performed <u>05-15-2015</u>		
3.	Weather Conditions:		
	Average air tempertaure (°C): 6-day total precipitation (in): Average wind speed/direction (mph):	12.74 0.33 8/ SW	
4.	Receiving Data:		
	Sample Location pH Temperature (C)  Receiving Water N/M N/M		
5.	Land Observations, as "Yes" or "No", for reporting r	month:	
	Visual Observations	<u>Effluent</u>	Receiving Water
	Floating and Suspended Materials of Waste Origin Odor Discoloration and Turbidity Evidence of Beneficial Water Use	No Not Required Not Required	No No No N/A
6.	Comments:		
7.	I certify that the information in this report, to the best Operator Signature.	t of my knowledge, i Date: <u>08-1</u>	

# Land Observation Report date: TFG-ASW - Arroyo Seco

1.	Reporting Period: Business Month <u>June</u> Year <u>2015</u>	<u>5</u>	
2.	Date compliance sampling performed <u>06-05-2015</u>		
3.	Weather Conditions:		
	Average air tempertaure (°C): 6-day total precipitation (in): Average wind speed/direction (mph):	16.63 0.00 7/ WSW	
4.	Receiving Data:		
	Sample Location pH Temperature (C)  Receiving Water N/M N/M		
5.	Land Observations, as "Yes" or "No", for reporting r	nonth:	
	Visual Observations	<u>Effluent</u>	Receiving Water
	Floating and Suspended Materials of Waste Origin Odor Discoloration and Turbidity Evidence of Beneficial Water Use	No No Not Required Not Required	<u>No</u> <u>No</u> <u>No</u> <u>N/A</u>
6.	Comments:		
7.	I certify that the information in this report to the bes	t of my knowledge, i	s true and correct.
	Operator Signature:	Date: <b>08-1</b>	1-2015

#### Self-Monitoring Report LLNL Mini Treatment Unit 02 (MTU02) AREA TFG-N

1. Reporting Period: Business Month April Year 2015 2. Dates (in **bold** and <u>underline</u>) treated ground water was discharged April 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 Total monthly time facility operated (hours): 724 3. Monthly Compliance Data: Date compliance sampling performed (m/d/y): 04-15-2015 Influent pH: Effluent pH: Effluent Temperature (°C): 4. Wellfield Data: Monthly Instantaneous Volume(gal) Flow Rate(gpm) Source W-1806 23,721 0.5 W-1807 163,608 3.8 Total: 187,329 4.3 5. Discharge Information: Receiving Discharge Location Water Station Volume Arroyo Las Positas TFC-R003 187,329 6. Comments: 7. I certify that the information in this report, to the best of my knowledge, is true and correct. \_ Date: **05-01-2015** Operator Signature:

## Self-Monitoring Report LLNL Mini Treatment Unit 02 (MTU02) AREA TFG-N

1. Reporting Perio	od: Business Mon	th <u>May</u> Year	2015	
2. Dates (in bold	and <u>underline</u> )	treated ground wa	ter was discharge	ed
May <u>(</u>	$\frac{01}{16} \frac{02}{17} \frac{03}{18} \frac{04}{19}$	$     \begin{array}{c cccc}       05 & 06 & 07 & 08 \\       \hline       20 & 21 & 22 & 23     \end{array} $	$\frac{09}{24}  \frac{10}{25}  \frac{11}{26}  \frac{12}{27}$	$\frac{13}{28} \frac{14}{29} \frac{15}{29}$
Total monthly	time facility ope	rated (hours):	706	
3. Monthly Comp	liance Data:			
Influent pH: Effluent pH:	nce sampling perf	formed (m/d/y):	$\begin{array}{r} \underline{05-15-2015} \\ \underline{7.0} \\ \underline{7.0} \\ \underline{22.2} \end{array}$	
4. Wellfield Data:				
Source	Monthly Volume(gal)	Instantaneous Flow Rate(gpm)		
W-1806 W-1807	22,319 165,494	0.6 4.0		
Total:	187,813	4.6		
5. Discharge Infor	mation:		Descioles	
Discharge I	<u>Location</u>		Receiving Water Station	Volume
Arroyo L	as Positas		TFC-R003	187,813
6. Comments:				
7. I certify that the	e information in the	nis report, to the b	est of my knowle	dge, is true and correc
Operator Signatur	e:////////////////////////////////////	Mer	Date: 0	<u>6-03-2015</u>

#### Self-Monitoring Report LLNL Mini Treatment Unit 02 (MTU02) AREA TFG-N

1. Reporting Period: Business Month <u>June</u> Year <u>2015</u>

2. Dates (in **bold** and <u>underline</u>) treated ground water was discharged

May June 30 31 / 02 03 04 05 06 07 08 09 10 11 12 13 14 15 / 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30

Total monthly time facility operated (hours): <u>545</u>

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y):	05-30-2015
Influent pH:	<u>7.0</u>
Effluent pH:	7.0
Effluent Temperature (°C):	<u>23.1</u>

4. Wellfield Data:

Source	Monthly Volume(gal)	Instantaneous Flow Rate(gpm)
W-1806	19,735	0.6
W-1807	125,219	4.5
Total:	144,954	<u>5.1</u>

5. Discharge Information:

70 000000000000000000000000000000000000	Receiving	
Discharge Location	Water Station	Volume
Arroyo Las Positas	TFC-R003	144,954

6. Comments:

Facility was shutdown on 06-03-2015 to assist in chemical spill clean up in storm drain. Facility was restarted on 06-11-2015.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Date: 07-17-2015

#### Self-Monitoring Report LLNL Portable Treatment Unit 5 (PTU5) AREA TF406

1. Reporting Period: Business Month April Year 2015

2. Dates (in **bold** and <u>underline</u>) treated ground water was discharged

April 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30

Total monthly time facility operated (hours): <u>525</u>

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y):	04-08-2015
Influent pH:	7.5
Effluent pH:	7.5
Effluent Temperature (°C):	21.1

4. Wellfield Data:

Source	Monthly Volume(gal)	Instantaneous Flow Rate(gpm)					
W-1309	82	4.5					
W-1310	274,489	8.8					
Total:	274,571	13.3					

5. Discharge Information:

	Receiving	
Discharge Location	Water Station	Volume
Arroyo Las Positas	TFC-R003	274,571

6. Comments:

Facility was shutdown at 07:46 on 04-14-2015 for a scheduled power outage. Facility was restarted at 13:45 on 04-22-2015 after the failed flow meter for W-1310 was replaced.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Date: 05-14-2015

## Self-Monitoring Report LLNL Portable Treatment Unit 5 (PTU5) AREA TF406

1. Reporting Period: Business Month May Year 2015												
2. Dates (in <b>bold</b> and <u>underline</u> ) treated ground water was discharged												
May $\underline{0}$	1 <u>02</u> <u>03</u> <u>04</u> 6 <u>17</u> <u>18</u> <u>19</u>	$\frac{05}{20}$ $\frac{06}{21}$ $\frac{07}{22}$ $\frac{08}{23}$	09     10     11     12       24     25     26     27	13 14 15 28 29								
Total monthly time facility operated (hours):704												
3. Monthly Compliance Data:												
Date compliance sampling performed (m/d/y):												
4. Wellfield Data:												
Source	Monthly Volume(gal)	Instantaneous Flow Rate(gpm	1)									
W-1309 W-1310	0 373,840	0.0 8.9										
Total:	373,840	8.9										
5. Discharge Inform	nation:		2									
Discharge Lo	ocation		Receiving Water Station	Volume								
Arroyo La	s Positas		TFC-R003	373,840								
6. Comments: NA												
7. I certify that the information in this report, to the best of my knowledge, is true and correct.												
Operator Signature	Billy	Lill	Date: 0	6-04-2015								

## Self-Monitoring Report LLNL Portable Treatment Unit 5 (PTU5) AREA TF406

1. Reporting Perio	d: Business Mor	th <u>June</u> Ye	ar <u>2015</u>		
2. Dates (in <b>bold</b>	and <u>underline</u> )	treated ground v	vater was discharge	ed	
June 0	60     31       01     02     03     04       6     17     18     19	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	3     09     10     11     12       3     24     25     26     27	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	
Total monthly	time facility ope	erated (hours):	772		
3. Monthly Compl	iance Data:				
Date compliant Influent pH: Effluent pH: Effluent Temp	nce sampling performance (°C):	formed (m/d/y):	$   \begin{array}{r}     \underline{06\text{-}16\text{-}2015} \\     \underline{7.5} \\     \underline{7.5} \\     \underline{22}   \end{array} $		
4. Wellfield Data:					
Source	Monthly Volume(gal)	Instantaneous Flow Rate(gpm	1)		
W-1309 W-1310	0 406,602	0.0 8.8			
Total:	406,602	8.8			
5. Discharge Inform	mation:		n		
Discharge L	ocation		Receiving Water Station	Volume	
Arroyo La	as Positas		TFC-R003	406,602	
6. Comments: NA					
7. I certify that the	information in the	nis report, to the	best of my knowled	dge, is true and corre	ct
Operator Signature	BUS	istal	Date: <u>0</u> ′	7-24-2015	

## Self-Monitoring Report LLNL GAC Treatment Unit 03 (GTU03) AREA TF406-NW

1. Reporting Per	nod: Business Mon	th <b>April</b> Year	2015										
2. Dates (in <b>bold</b> and <u>underline</u> ) treated ground water was discharged													
April	01 02 03 04 16 17 18 19	05 06 07 08 <b>20 21 22 23</b>		$\frac{13}{28} \frac{14}{29} \frac{15}{30}$									
Total monthly time facility operated (hours): 403													
3. Monthly Compliance Data:													
Date compliance sampling performed $(m/d/y)$ :  Influent pH:  Effluent pH: $\frac{7.0}{7.0}$ Effluent Temperature (°C): $\frac{23}{2}$													
4. Wellfield Dat	a:												
Source	Monthly Volume(gal)	Instantaneous Flow Rate(gpm)											
W-1801	172,815	7.3											
Total:	172,815	<u>7.3</u>											
5. Discharge Inf	ormation:		saako ye sa										
Discharge	Location		Receiving Water Station Volume										
Arroyo	Las Positas		TFC-R003	172,815									
6. Comments: System was secure for W-1801 well development 2/08/2015 to 04/13/2015													
7. I certify that t	he information in th	us report, to the be	est of my knowled	lge, is true and correct									
Operator Signatu	ure:	Men	Date: <u>05</u>	<u>5-01-2015</u>									

## Self-Monitoring Report LLNL GAC Treatment Unit 03 (GTU03) AREA TF406-NW

1. Reporting Period: Business Month <u>May</u> Year <u>2015</u>												
2. Dates (in <b>bold</b> and <u>underline</u> ) treated ground water was discharged												
May <u>0</u>	$\frac{1}{6}$ $\frac{02}{17}$ $\frac{03}{18}$ $\frac{04}{19}$	$\begin{array}{c cccc} 05 & 06 & 07 & 08 \\ \hline 20 & 21 & 22 & 23 \end{array}$	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	$\frac{13}{28} \frac{14}{29} \frac{15}{29}$								
Total monthly time facility operated (hours):748												
3. Monthly Compliance Data:												
Date compliance sampling performed (m/d/y):												
4. Wellfield Data:												
Source	Monthly Volume(gal)	Instantaneous Flow Rate(gpm)										
W-1801	311,609	7.0										
Total:	311,609	7.0										
5. Discharge Inform	nation:		D									
Discharge Lo	ocation		Receiving Water Station	Volume								
Arroyo La	s Positas		TFC-R003	311,609								
6. Comments:												
7. I certify that the information in this report, to the best of my knowledge, is true and correct.  Operator Signature: Date: 06-03-2015												

## Self-Monitoring Report LLNL GAC Treatment Unit 03 (GTU03) AREA TF406-NW

1. Reporting Period: Business Month <u>June</u> Year <u>2015</u>													
2. Dates (in <b>bold</b> and <u>underline</u> ) treated ground water was discharged													
May June	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	05 06 07 08 20 21 22 23	09     10     11     12       24     25     26     27	$\frac{13}{28} \frac{14}{29} \frac{15}{30}$									
Total monthly time facility operated (hours): <u>571</u>													
3. Monthly Compliance Data:													
Date compliance sampling performed $(m/d/y)$ :  Influent pH:  Effluent pH: $\frac{7.0}{7.0}$ Effluent Temperature (°C): $\frac{22.1}{2}$													
4. Wellfield Data	:												
Source	Monthly Volume(gal)	Instantaneous Flow Rate(gpm)											
W-1801	268,652	7.8											
Total:	268,652	<u>7.8</u>											
5. Discharge Info	ormation:												
Discharge	Location		Receiving Water Station	Volume									
Arroyo l	Las Positas		TFC-R003	268,652									
6. Comments: system secured from 6/24/2015 through the end of this reporting period for drilling activities near extraction well.													
7. I certify that the information in this report, to the best of my knowledge, is true and correct													
Operator Signatu	re! <u>[[[]]] (</u>	M	Date: <u>0</u>	7-10-201 <u>5</u>									

### Self-Monitoring Report LLNL Solar Treatment Unit 09 (STU09) AREA TF518-N

1. Reporting Period: Business Month <u>April</u> Year <u>2015</u>															
2. Dates (in <b>bold</b> and <u>underline</u> ) treated ground water was discharged															
E SOUTH THE SOUT	01 16	02 17	03 18				07 22		09 24	10 25	11 26	12 27	13 28	14 29	15
Total monthly time facility operated (hours): _0															
3. Monthly Compliance Data:															
Date compliance sampling performed (m/d/y): Not Measured Influent pH: Effluent pH: Effluent Temperature (°C):															
4. Wellfield Data:															
Source		Mon Volu	thly me(;	gal)			aneo ate(s								
W-1410				0			0.0	)							
Total:	-		((100-10-	0			0.0	<u>)</u>							
5. Discharge Infor	rma	tion:							n						
Discharge I	Loca	ation	Ĺ							eivii ter S	-	<u>n</u>	Ž	Volu	<u>me</u>
Arroyo L	as ]	Posi	<u>tas</u>						<u>T</u>	FC-	R003	3			_0
6. Comments:  This treatment facility was shut down on 2-20-08 due to elevated tritium activities in the facility influent. The facility will be restarted once a solution for mixed waste generation is implemented.															
7. I certify that the information in this report, to the best of my knowledge, is true and correct															
Operator Signatur	e: _		Cou		car	TAS	2	7			Dat	e: <b>0</b> 4	<del>-30-</del>	2015	į

## Self-Monitoring Report LLNL Solar Treatment Unit 09 (STU09) AREA TF518-N

1. Reporting Period: Business Month May Year 2015															
2. Dates (in <b>bold</b> and <u>underline</u> ) treated ground water was discharged															
April May	30 01 16	02 17		04 19					09 24		11 26	12 27	13 28	14	15
Total monthly time facility operated (hours): _0															
3. Monthly Compliance Data:															
Date compliance sampling performed (m/d/y): Not Measured Influent pH: Effluent pH: Effluent Temperature (°C):															
4. Wellfield Data	a:														
Source		Mon <u>Volu</u>		gal)			aneo ate(g	us gpm)							
W-1410				0			0.0	0							
Total:	8		******	<u>0</u>			0.0	0							
5. Discharge Info	orma	tion	:						Day	ceivi	200				
Discharge	Loc	ation	<u>l</u>							ter S	_	<u>n</u>	Ŋ	Volu	<u>me</u>
Arroyo	Las	Posi	<u>tas</u>						_T	FC-	R003	3		5	_0
6. Comments: This treatment facility was shut down on 2-20-08 due to elevated tritium activities in the facility influent. The facility will be restarted once a solution for mixed waste generation is implemented.															
7. I certify that the information in this report, to the best of my knowledge, is true and correct Operator Signature:  Date: 05-29-2015															

## Self-Monitoring Report LLNL Solar Treatment Unit 09 (STU09) AREA TF518-N

1. Reporting Pe	riod:	Busi	ness	Mor	nth	Ju	ne	Year	r <u>201</u>	<u>5</u>					
2. Dates (in bol	l <b>d</b> an	d <u>un</u>	derli	<u>ne</u> )	trea	ted g	roun	d wa	iter v	vas d	isch	argeo	i		
May June	29 01 16	02		04 19	05 20			08 23	09 24		11 26	12 27	13 28		15
Total month	ıly ti	me fa	acilit	у ор	erate	d (ho	ours)	: _	<u>0</u>						
3. Monthly Con	nplia	nce I	Data:												
Date compl Influent pH Effluent pH Effluent Te 4. Wellfield Date	: i: mper		<i>.</i>		form	ied (i	m/d/	y): <u>N</u>	lot N	1eas	ured				
4. Weillield Da	ia.														
Source		Mon Volu		gal)			aneo ate(g	us gpm)							
W-1410				0			0.0	0							
Total:				0			0.0	0							
5. Discharge Inf	forma	ation	:												
Discharge	e Loc	ation	<u>1</u>							ceivi ter S	ng tatio	<u>n</u>	3	Volu	<u>me</u>
Arroyo	Las	Posi	tas						_T	FC-	R003	3			0
6. Comments: This treat in the fact waste gen	ility i	influe	ent.	The	facili	ity w									
7. I certify that	the in	forn	atio	n in 1						of my	kno	wlec	lge, i	is tru	e and correct
Operator Signat	ure: .	(	Va	u	19	EN D	ign.	, C <sub>r</sub>	•		Dat	e: 0 <u>6</u>	5-30-	2015	5

# Self-Monitoring Report LLNL Treatment Facility 518-HDTANK (TF518-HDTANK) AREA TF518-PZ

1. Reporting Period: Business Month April Year 2015

2. Dates (in **bold** and <u>underline</u>) treated ground water was discharged

April 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30

Total monthly time facility operated (hours): <u>572</u>

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): Not Measured

Influent pH:

Effluent pH:

Effluent Temperature (°C):

4. Wellfield Data:

	Monthly	Instantaneous
Source	Volume(gal)	Flow Rate(gpm)
W-1615	24	0.0
W-518-1913	0	0.0
W-518-1914	0	0.0
W-518-1915	13	0.0
SVB-518-201	0	0.0
SVB-518-204	0	0.0
Total:	<u>37</u>	0.0

5. Discharge Information:

Discharge Location	Receiving Water Station	Volume
<b>West Perimeter Drainage Channel</b>	TFB-R002	36

#### 6. Comments:

HDTANK operations secured 4-20-15 in preparation for Nitrogen Dissipation Test. Facility was restarted 4-23-15. Facility was secured 4-27-15 at 13:00 to allow groundwater levels to increase prior to collection of quarterly samples. Facility was restarted 4-30-15. Groundwater collected at this facility is transferred to and treated at TFB Main.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Date: 05-06-2015

# Self-Monitoring Report LLNL Treatment Facility 518-HDTANK (TF518-HDTANK) AREA TF518-PZ

- 1. Reporting Period: Business Month May Year 2015
- 2. Dates (in **bold** and <u>underline</u>) treated ground water was discharged

May 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29

Total monthly time facility operated (hours): \_697

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): Not Measured

Influent pH:

Effluent pH:

Effluent Temperature (°C):

4. Wellfield Data:

C	Monthly	Instantaneous
Source	Volume(gal)	Flow Rate(gpm)
W-1615	26	0.0
W-518-1913	0	0.0
W-518-1914	0	0.0
W-518-1915	20	0.0
SVB-518-201	0	0.0
SVB-518-204	0	0.0
Total:	<u>46</u>	0.0

5. Discharge Information:

	Receiving	
Discharge Location	Water Station	Volume
West Perimeter Drainage Channel	TFB-R002	45

6. Comments:

Groundwater from this facility is transferred to and treated at TFB Main.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Date: 06-03-2015

# Self-Monitoring Report LLNL Treatment Facility 518-HDTANK (TF518-HDTANK) AREA TF518-PZ

- 1. Reporting Period: Business Month June Year 2015
- 2. Dates (in **bold** and <u>underline</u>) treated ground water was discharged

May June 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30

Total monthly time facility operated (hours): 767

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): Not Measured

Influent pH:

Effluent pH:

Effluent Temperature (°C):

4. Wellfield Data:

	Monthly	Instantaneous
Source	Volume(gal)	Flow Rate(gpm)
W-1615	19	0.0
W-518-1913	0	0.0
W-518-1914	0	0.0
W-518-1915	16	0.0
SVB-518-201	0	0.0
SVB-518-204	0	0.0
Total:	35	0.0

5. Discharge Information:

	Receiving	
Discharge Location	Water Station	<u>Volume</u>
West Perimeter Drainage Channel	TFB-R002	35

6. Comments:

Groundwater from this facility is transferred to TFB Main for treatment.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Date: 07-16-2015

## Self-Monitoring Report LLNL Catalytic Reductive Dehalogenation 1 (CRD1) AREA TF5475-1

1. Reporting Per	iod:	Busi	ness	Moi	nth	A	<u>oril</u>	Yea	r <u>20</u>	<u>15</u>						
2. Dates (in bol	d an	d <u>un</u>	derli	ine )	trea	ted g	roun	ıd wa	iter v	vas d	ischa	argeo	ŀ			
April	01 16		11.000	-1000			07 22	08 23	0.00	10 25	11 26	12 27	13 28	50 -00	15 30	
Total month	ly ti	me fa	acilit	у ор	erate	d (h	ours)	: _	0							
3. Monthly Com	plia	nce I	Data:													
Date compliance sampling performed (m/d/y): Not Measured Influent pH: Effluent pH: Effluent Temperature (°C):																
4. Wellfield Data:																
Source		Monthly Instantaneous Volume(gal) Flow Rate(gpm)														
W-1302-2	2			0			0.0	0								
Total:				0			0.0	0								
5. Discharge Inf	orma	ation	:						Dec	eivi	na					
Discharge	Loc	atior	<u>1</u>								tatio	<u>n</u>		Volu	me	
CRD-1	injec	ction	Ĺ							V-13	02-1			33	0	
6. Comments: The treatment facility was shut down on 7/27/07. The facility will be restarted once a solution for mixed waste generation is implemented.																
7. I certify that the information in this report, to the best of my knowledge, is true and correct.  Operator Signature: Date: 05-14-2015																

## Self-Monitoring Report LLNL Catalytic Reductive Dehalogenation 1 (CRD1) AREA TF5475-1

1. Reporting Perio	od: Busi	ness Mo	nth _	May	Year	201	<u>5</u>					
2. Dates (in bold	and un	derline_)	treate	d groun	nd wa	iter v	vas d	isch	argeo	i		
	01 02 16 17	AMERICAN PROPERTY.		06 07 21 22				0.200	12 27	13 28	14 29	15
Total monthly	time fa	acility op	erated	(hours)	: _!	0						
3. Monthly Comp	liance [	Data:										
Date compliance sampling performed (m/d/y): Not Measured Influent pH: Effluent pH: Effluent Temperature (°C):												
4. Wellfield Data:												
Source		thly ime(gal)		antaneo v Rate(		Ĺ						
W-1302-2		0		0.	0							
Total:		<u>0</u>		0.	0							
5. Discharge Infor	mation	:				Day	ceivi	na				
Discharge I	ocation	<u>1</u>					ter S		n	3	Volu	<u>me</u>
CRD-1 in	ijection					V	V-13	02-1			13	_0
<ol> <li>Comments:         The treatment facility was shut down on 7/27/07. The facility will be restarted once a solution for mixed waste generation is implemented.     </li> </ol>												
7. I certify that the information in this report, to the best of my knowledge, is true and correct												
Operator Signatur	e:Bl		Ald	)				Dat	te: <u>00</u>	5-04-	2015	5

## Self-Monitoring Report LLNL Catalytic Reductive Dehalogenation 1 (CRD1) AREA TF5475-1

1. Reporting Per	iod:	Busi	ness	Mor	nth	<u>Ju</u>	ne	Yea	r <u>201</u>	5					
2. Dates (in bol	d an	d <u>un</u>	derli	ne )	trea	ted g	roun	nd wa	ater v	vas d	lisch	argeo	ł		
May June	30 01 16							08 23			11 26			14 29	
Total month	dy ti	me fa	acilit	у ор	erate	d (h	ours)	: _	0						
3. Monthly Compliance Data:															
Date compliance sampling performed (m/d/y): Not Measured Influent pH: Effluent pH: Effluent Temperature (°C):															
4. Wellfield Dat	a:														
Source		Mon <u>Volu</u>	•	gal)			aneo (ate()	us gpm)	<u>)</u>						
W-1302-2	2			0			0.	0							
Total:				0			0.	0							
5. Discharge Inf	orma	ation	:						Da	ceivi	na				
Discharge	Loc	ation	1								tatio	<u>n</u>	,	Volu	me
CRD-1	inje	ction	1							V-13	02-1				_0
<ol> <li>Comments:         The treatment facility was shut down on 7/27/07. The facility will be restarted once a solution for mixed waste generation is implemented.     </li> </ol>															
7. I certify that to Operator Signat		-	2 1	n in	this i	tal	t, to	the b	best o		knc Dat				

## Self-Monitoring Report LLNL GAC Treatment Unit 09 (GTU09) AREA TF5475-2

1. Reporting Per	riod: Business Mon	nth <u>April</u>	Year <u>2015</u>	5						
2. Dates (in bol	d and <u>underline</u> )	treated groun	d water wa	as discharg	ged					
April	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	$\frac{05}{20}  \frac{06}{21}  \frac{07}{22}$	$\frac{08}{23} \frac{09}{24} \frac{1}{2}$	$\frac{10}{25}$ $\frac{11}{26}$ $\frac{1}{2}$	$\frac{2}{7}$ $\frac{13}{28}$ $\frac{14}{29}$ $\frac{15}{30}$					
Total month	ly time facility ope	erated (hours)	: <u>705</u>							
3. Monthly Compliance Data:										
Date compliance sampling performed $(m/d/y)$ :  Influent pH:  Effluent pH: $\frac{7.0}{7.0}$ Effluent Temperature (°C): $\frac{21.5}{2}$										
4. Wellfield Dat	a:									
Source	Monthly Volume(gal)	Instantaneous Flow Rate(g								
W-1108 W-1415	92,297 123	2.3 0.0								
Total:	92,420	2.3	3							
5. Discharge Info	ormation:			•070••040000						
Discharge	Location			iving er Station	Volume					
Arroyo	Las Positas		_TF	C-R003	92,420					
6. Comments:										
7. I certify that the Comperator Signatu	ne information in the	1			edge, is true and c	orrect				

#### Self-Monitoring Report LLNL GAC Treatment Unit 09 (GTU09) AREA TF5475-2

1. Reporting Period: Business Month May Year 2015

2. Dates (in **bold** and <u>underline</u>) treated ground water was discharged

May 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29

Total monthly time facility operated (hours): 451

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y):	05-21-2015
Influent pH:	<u>7.0</u>
Effluent pH:	7.0
Effluent Temperature (°C):	22.1

4. Wellfield Data:

Source	Monthly <u>Volume(gal)</u>	Instantaneous Flow Rate(gpm)
W-1108	56,923	2.5
W-1415	0	0.0
Total:	56,923	2.5

5. Discharge Information:

	Receiving	
<u>Discharge Location</u>	Water Station	<u>Volume</u>
Arroyo Las Positas	TFC-R003	56,923

6. Comments:

System down time for the month due to electronic control failure and trouble shooting.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature Date: 06-03-2015

## Self-Monitoring Report LLNL GAC Treatment Unit 09 (GTU09) AREA TF5475-2

1. Reporting Period	1. Reporting Period: Business Month <u>June</u> Year <u>2015</u>						
2. Dates (in <b>bold</b> and <u>underline</u> ) treated ground water was discharged							
400-	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	$\frac{13}{28} \frac{14}{29} \frac{15}{29}$			
Total monthly t	time facility ope	erated (hours):	<u>762</u>				
3. Monthly Complia	ance Data:						
Date compliance sampling performed (m/d/y):							
4. Wellfield Data:							
Source	Monthly Volume(gal)	Instantaneous Flow Rate(gpm)		ů.			
W-1108 W-1415	93,939 0	2.1 0.0					
Total:	93,939	2.1	<del></del> ,				
5. Discharge Inform	nation:		D				
Discharge Lo	cation		Receiving Water Station	<u>Volume</u>			
Arroyo Las	s Positas		TFC-R003	93,939			
6. Comments:							
7. I certify that the information in this report, to the best of my knowledge, is true and correct.  Operator Signature  Date: 07-10-2015							

#### Self-Monitoring Report LLNL Catalytic Reductive Dehalogenation 2 (CRD2) AREA TF5475-3

1. Reporting Period: Business Month April Year 2015

2. Dates (in **bold** and <u>underline</u>) treated ground water was discharged

April 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30

Total monthly time facility operated (hours):  $\underline{0}$ 

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): Not Measured

Influent pH:

Effluent pH:

Effluent Temperature (°C):

4. Wellfield Data:

Source	Monthly Volume(gal)	Instantaneous Flow Rate(gpm)
W-1604	0	0.0
W-1605	0	0.0
W-1608	0	0.0
W-1609	0	0.0
Total:	0	0.0

5. Discharge Information:

	Receiving	
Discharge Location	Water Station	Volume
CRD-2 injection	_W-1610	_0

6. Comments:

The treatment facility was shut down on 8/31/07. The facility will be restarted once a solution for mixed waste generation is implemented.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Date: 05-14-2015

#### Self-Monitoring Report LLNL Catalytic Reductive Dehalogenation 2 (CRD2) AREA TF5475-3

1. Reporting Period: Business Month May Year 2015

2. Dates (in **bold** and <u>underline</u>) treated ground water was discharged

May 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29

Total monthly time facility operated (hours):  $\underline{\mathbf{0}}$ 

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): Not Measured

Influent pH:

Effluent pH:

Effluent Temperature (°C):

4. Wellfield Data:

Source	Monthly Volume(gal)	Instantaneous Flow Rate(gpm)
W-1604	0	0.0
W-1605	0	0.0
W-1608	0	0.0
W-1609	0	0.0
Total:	0	0.0

5. Discharge Information:

	Receiving	
Discharge Location	Water Station	Volume
CRD-2 injection	W-1610	_0

6. Comments:

The treatment facility was shut down on 8/31/07. The facility will be restarted once a solution for mixed waste generation is implemented.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Date: 06-04-2015

#### Self-Monitoring Report LLNL Catalytic Reductive Dehalogenation 2 (CRD2) AREA TF5475-3

1. Reporting Period: Business Month <u>June</u> Year <u>2015</u>

2. Dates (in **bold** and underline ) treated ground water was discharged

May	30	31													
June	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15
	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30

Total monthly time facility operated (hours): \_0

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): Not Measured

Influent pH:

Effluent pH:

Effluent Temperature (°C):

4. Wellfield Data:

Source	Monthly Volume(gal)	Instantaneous Flow Rate(gpm)
W-1604	0	0.0
W-1605	0	0.0
W-1608	0	0.0
W-1609	0	0.0
Total:	0	0.0

5. Discharge Information:

	Receiving	
Discharge Location	Water Station	Volume
CRD-2 injection	W-1610	0

6. Comments:

The treatment facility was shut down on 8/31/07. The facility will be restarted once a solution for mixed waste generation is implemented.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Date: 07-24-2015

#### Self-Monitoring Report LLNL Vapor Extraction System 08 (VES08) AREA VTF406-HS

- 1. Reporting Period: Business Month April Year 2015
- 2. Dates (in **bold** and <u>underline</u>) treatment facility operated

April 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30

3. Wellfield Data:

	Monthly	Instantaneous			Hours	
Source	Volume(cu. ft)	Flow Rate(scfm)	P(in. Hg)	$T(^{\circ}F)$	of Op.	
W-217	499,586	11.7	-2.21	68	717	
W-514-2007A	0	0.0	0	0	0	
W-514-2007B	374,578	8.6	-2.41	68	717	
Total:	874,164	20.3			70 50 10	

- 4. Comments:
- 5. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Date: 05-11-2015

#### Self-Monitoring Report LLNL Vapor Extraction System 08 (VES08) AREA VTF406-HS

- 1. Reporting Period: Business Month May Year 2015
- 2. Dates (in **bold** and <u>underline</u>) treatment facility operated

May <u>01 02 03 04 05 06 07 08 09 10 11 12 13 14 15</u> <u>16 17 18 19 20 21 22 23 24 25 26 27 28</u>

3. Wellfield Data:

Source	Monthly Volume(cu. ft)	Instantaneous Flow Rate(scfm)	P(in. Hg)	<u>T(°F)</u>	Hours of Op.
W-217	473,802	11.8	-2.14	67	674
W-514-2007A	0	0.0	0	0	0
W-514-2007B	352,755	8.7	-2.33	67	674
Total:	826,557	20.5			

4. Comments:

5. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:

Date: 08-12-2015

#### Self-Monitoring Report LLNL Vapor Extraction System 08 (VES08) AREA VTF406-HS

- 1. Reporting Period: Business Month June Year 2015
- 2. Dates (in **bold** and <u>underline</u>) treatment facility operated

3. Wellfield Data:

Source	Monthly Volume(cu. ft)	Instantaneous Flow Rate(scfm)	P(in. Hg)		Hours of Op.
W-217	581,730	12.2	-1.89	76	792
W-514-2007A	~~~	0.0	0	0	0
W-514-2007B	391,067	8.1	-2.13	76	792
Total:	972,797	20.3			

4. Comments:

5. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Date: 07-13-2015

- 1. Reporting Period: Business Month April Year 2015
- 2. Dates (in **bold** and <u>underline</u>) treatment facility operated

April 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30

3. Wellfield Data:

	Monthly	Instantaneous			Hours
Source	Volume(cu. ft	Flow Rate(scfm)	P(in. Hg)	<u>T(°F)</u>	of Op.
W-2208A	0	0.0	0	0	0
W-2208B	784,334	18.1	-6.4	64	724
W-2204	0	0.0	0	0	0
W-2205	0	0.0	0	0	0
W-2206	0	0.0	0	0	0
W-2207A	0	0.0	0	0	0
W-2207B	767,894	17.9	-7	64	724
Total:	1,552,228	36.0			

4. Comments:

5. I certify that the information in this report, to the best of my knowledge, is true and correct.

- 1. Reporting Period: Business Month <u>May</u> Year <u>2015</u>
- 2. Dates (in **bold** and <u>underline</u>) treatment facility operated

May 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28

3. Wellfield Data:

	Monthly	Instantaneous			Hours
Source	Volume(cu. ft	Flow Rate(scfm)	P(in. Hg)	<u>T(°F)</u>	of Op.
W-2204	0	0.0	0	0	0
W-2205	0	0.0	0	0	0
W-2206	0	0.0	0	0	0
W-2207A	0	0.0	0	0	0
W-2207B	749,328	18.3	-7	64	673
W-2208A	0	0.0	0	0	0
W-2208B	745,382	18.0	-6.3	64	673
Total:	1,494,710	36.2			

4. Comments:

5. I certify that the information in this report, to the best of my knowledge, is true and correct.

- 1. Reporting Period: Business Month <u>June</u> Year <u>2015</u>
- 2. Dates (in bold and underline ) treatment facility operated

3. Wellfield Data:

Source	Monthly In Volume(cu. ft) Fl	stantaneous ow Rate(scfm)	P(in. Hg)		Hours of Op.
W-2204	0	0.0	0	0	0
W-2205	0	0.0	0	0	0
W-2206	0	0.0	0	0	0
W-2207A	17	0.0	0	0	0
W-2207B	878,926	18.7	-6.7	76	785
W-2208A	30	0.0	0	0	0
W-2208B	841,426	17.9	-6.2	76	785
Total:	1,720,399	36.6			_

4. Comments:

5. I certify that the information in this report, to the best of my knowledge, is true and corre	rrect
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- 1. Reporting Period: Business Month April Week: 1 Year 2015
- 2. Dates (in **bold** and <u>underline</u>) treatment facility operated

March 28 29 30 31 April 01 02 03

3. Wellfield Data:

	Weekly	Instantaneous			Hours
Source	Volume(cu. ft)	Flow Rate(scfm)	P(in. Hg)	<u>T(°F)</u>	of Op.
W-2214A	0	0.0	0	0	0
W-2214B	0	0.0	0	0	0
W-2215A	0	0.0	0	0	0
W-2215B	0	0.0	0	0	0
W-2217A	0	0.0	0	0	0
W-2217B	0	0.0	0	0	0
SVB-518-201	0	0.0	0	0	0
SVB-518-204	0	0.0	0	0	0
Total:	0	0.0			

4. Comments:

Facility did not operate during reporting week.

5. I certify that the information in this report, to the best of my knowledge, is true and correct.

- 1. Reporting Period: Business Month April Week: 2 Year 2015
- 2. Dates (in **bold** and <u>underline</u>) treatment facility operated

04 05 06 07 08 09 10

### 3. Wellfield Data:

	Weekly	Instantaneous			Hours
Source	Volume(cu. ft)	Flow Rate(scfm)	P(in. Hg)	<u>T(°F)</u>	of Op.
W-2214A	0	0.0			
	0	0.0	0	0	0
W-2214B	0	0.0	0	0	0
W-2215A	0	0.0	0	0	0
W-2215B	0	0.0	0	0	0
W-2217A	0	0.0	0	0	0
W-2217B	0	0.0	0	0	0
SVB-518-201	. 0	0.0	0	0	0
SVB-518-204	0	0.0	0	0	0
Total:	<u>0</u>	0.0			

#### 4. Comments:

Facility did not operate during reporting week.

5. I certify that the information in this report, to the best of my knowledge, is true and correct.

Date: 05-06-2015

- 1. Reporting Period: Business Month April Week: 3 Year 2015
- 2. Dates (in **bold** and <u>underline</u>) treatment facility operated

April

11 12 13 14 15 16 17

3. Wellfield Data:

	Weekly	Instantaneous			Hours
Source	Volume(cu. ft)	Flow Rate(scfm)	P(in. Hg)	<u>T(°F)</u>	of Op.
W-2214A	0	0.0	0	0	0
W-2214B	0	0.0	0	0	0
W-2215A	0	0.0	0	0	0
W-2215B	0	0.0	0	0	0
W-2217A	0	0.0	0	0	0
W-2217B	0	0.0	0	0	0
SVB-518-201	0	0.0	0	0	0
SVB-518-204	0	0.0	0	0	0
Total:	<u>0</u>	0.0			

4. Comments:

Facility did not operate during this reporting week.

5. I certify that the information in this report, to the best of my knowledge, is true and correct.

- 1. Reporting Period: Business Month April Week: 4 Year 2015
- 2. Dates (in **bold** and <u>underline</u>) treatment facility operated

18 19 20 21 22 23 24

3. Wellfield Data:

	Weekly	Instantaneous		I	Hours
Source	Volume(cu. ft)	Flow Rate(scfm)	P(in. Hg)	<u>T(°F)</u> (	of Op.
W-2214A	0	0.0	0	0	0
W-2214B	0	0.0	0	0	0
W-2215A	0	0.0	0	0	0
W-2215B	0	0.0	0	0	0
W-2217A	0	0.0	0	0	0
W-2217B	0	0.0	0	0	0
SVB-518-201	0	0.0	0	0	0
SVB-518-204	0	0.0	0	0	0
Total:	<u>0</u>	0.0			

4. Comments:

Facility did not operate during reporting week.

5. I certify that the information in this report, to the best of my knowledge, is true and correct.

Nom Date: 05-06-2015 Operator Signature:

1. Reporting Period: Business Month May Week: 1 Year 2015

2. Dates (in **bold** and <u>underline</u>) treatment facility operated

April 25 26 27 28 29 30 May 01

3. Wellfield Data:

	Weekly	Instantaneous			Hours
Source	Volume(cu. ft)	Flow Rate(scfm)	<u>P(in, Hg)</u> '	Γ(°F)	of Op.
W-2214A	0	0.0	0	0	0
W-2214B	0	0.0	0	0	0
W-2215A	0	0.0	0	0	0
W-2215B	0	0.0	0	0	0
W-2217A	0	0.0	0	0	0
W-2217B	0	0.0	0	0	0
SVB-518-201	0	0.0	0	0	0
SVB-518-204	0	0.0	0	0	0
Total:	<u>0</u>	0.0			

4. Comments:

Facility did not operate during reporting week.

5. I certify that the information in this report, to the best of my knowledge, is true and correct.

- 1. Reporting Period: Business Month May Week: 2 Year 2015
- 2. Dates (in **bold** and <u>underline</u>) treatment facility operated

May

02 03 04 05 06 07 08

3. Wellfield Data:

	Weekly	Instantaneous			Hours
Source	Volume(cu. ft)	Flow Rate(scfm)	P(in. Hg)	<u>T(°F)</u>	of Op.
W-2214A	0	0.0	0	0	0
W-2214B	0	0.0	0	0	0
W-2215A	0	0.0	0	0	0
W-2215B	0	0.0	0	0	0
W-2217A	0	0.0	0	0	0
W-2217B	0	0.0	0	0	0
SVB-518-201	0	0.0	0	0	0
SVB-518-204	0	0.0	0	0	0
Total:	<u>0</u>	0.0			

4. Comments:

Facility did not operate during reporting week.

5. I certify that the information in this report, to the best of my knowledge, is true and correct.

1. Reporting Period: Business Month May Week: 3 Year 2015

2. Dates (in **bold** and <u>underline</u>) treatment facility operated

May

09 10 11 12 13 14 15

3. Wellfield Data:

	Weekly	Instantaneous			Hours
Source	Volume(cu. ft)	Flow Rate(scfm)	P(in. Hg)	<u>T(°F)</u>	of Op.
W-2214A	0	0.0	0	0	0
W-2214B	0	0.0	0	0	0
W-2215A	0	0.0	0	0	0
W-2215B	0	0.0	0	0	0
W-2217A	0	0.0	0	0	0
W-2217B	0	0.0	0	0	0
SVB-518-201	0	0.0	0	0	0
SVB-518-204	0	0.0	0	0	0
Total:	<u>0</u>	0.0			

4. Comments:

Facility did not operate during reporting week.

5. I certify that the information in this report, to the best of my knowledge, is true and correct.

- 1. Reporting Period: Business Month May Week: 4 Year 2015
- 2. Dates (in **bold** and <u>underline</u>) treatment facility operated

May

16 17 18 19 20 21 22

3. Wellfield Data:

	Weekly	Instantaneous			Hours
Source	Volume(cu. ft)	Flow Rate(scfm)	P(in. Hg)	$T(^{o}F)$	of Op.
W-2214A	0	0.0	0	0	0
W-2214B	0	0.0	0	0	0
W-2215A	0	0.0	0	0	Õ
W-2215B	0	0.0	0	0	0
W-2217A	0	0.0	0	0	0
W-2217B	0	0.0	0	0	0
SVB-518-201	0	0.0	0	0	0
SVB-518-204	0	0.0	0	0	0
Total:	<u>0</u>	0.0			

4. Comments:

Facility did not operate during reporting week.

5. I certify that the information in this report, to the best of my knowledge, is true and correct.

- 1. Reporting Period: Business Month May Week: 5 Year 2015
- 2. Dates (in **bold** and <u>underline</u>) treatment facility operated

23 24 25 26 27 28 29

#### 3. Wellfield Data:

	Weekly	Instantaneous		]	Hours
Source	Volume(cu. ft)	Flow Rate(scfm)	P(in. Hg)	Γ(°F) (	of Op.
W-2214A	0	0.0	0	0	0
W-2214B	0	0.0	0	0	0
W-2215A	0	0.0	0	0	0
W-2215B	0	0.0	0	0	0
W-2217A	0	0.0	0	0	0
W-2217B	0	0.0	0	0	0
SVB-518-201	0	0.0	0	0	0
SVB-518-204	0	0.0	0	0	0
Total:	<u>0</u>	0.0			

4. Comments:

Facility did not operate during reporting week.

5. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature

1. Reporting Period: Business Month April Week: 1 Year 2015

2. Dates (in **bold** and <u>underline</u>) treatment facility operated

March <u>28</u> <u>29</u> <u>30</u> <u>31</u> April 01 02 03

3. Wellfield Data:

	Weekly	Instantaneous			Hours
Source	Volume(cu. ft)	Flow Rate(scfm)	P(in. Hg)	<u>T(°F)</u>	of Op.
W-1615	40,176	4.0	-16	43	167
W-518-1913	0	0.0	0	0	0
W-518-1914	0	0.0	0	0	0
W-518-1915	21,092	2.1	-18	43	167
SVB-518-201	0	0.0	0	0	0
SVB-518-204	0	0.0	0	0	0
Total:	61,268	6.1			

4. Comments:

5. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: \_\_\_\_ Date: 05-06-2015

- 1. Reporting Period: Business Month April Week: 2 Year 2015
- 2. Dates (in **bold** and <u>underline</u>) treatment facility operated

<u>04</u> <u>05</u> <u>06</u> <u>07</u> <u>08</u> <u>09</u> <u>10</u>

3. Wellfield Data:

	Weekly	Instantaneous			Hours
Source	Volume(cu. ft)	Flow Rate(scfm)	P(in. Hg)	<u>T(°F)</u>	of Op.
W-1615	40,361	4.0	-15.5	47	168
W-518-1913	0	0.0	0	0	168
W-518-1914	0	0.0	0	0	168
W-518-1915	21,189	2.1	-18	47	168
SVB-518-201	0	0.0	0	0	168
SVB-518-204	0	0.0	0	0	168
Total:	61,550	<u>6.1</u>			

4. Comments:

5. I certify that the information in this report, to the best of	of my knowledge, is true and correct
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\_ Date: 05-06-2015 Operator Signature:

- 1. Reporting Period: Business Month April Week: 3 Year 2015
- 2. Dates (in **bold** and <u>underline</u>) treatment facility operated

April <u>11 12 13 14 15 16 17</u>

3. Wellfield Data:

	Weekly	Instantaneous			Hours	
Source	Volume(cu. ft)	Flow Rate(scfm)	P(in. Hg)	<u>T(°F)</u>	of Op.	
W-1615	39,647	3.9	-16.5	59	169	
W-518-1913	0	0.0	0	0	0	
W-518-1914	0	0.0	0	0	0	
W-518-1915	21,348	2.1	-18	59	169	
SVB-518-201	0	0.0	0	0	0	
SVB-518-204	0	0.0	0	0	0	
Total:	60,995	6.0				_

4. Comments:

5. I certify that the information in this report, to the best of my knowledge, is true and correct.

- 1. Reporting Period: Business Month April Week: 4 Year 2015
- 2. Dates (in bold and underline ) treatment facility operated

April <u>18 19 20</u> 21 <u>22 23 24</u>

#### 3. Wellfield Data:

	Weekly	Instantaneous			Hours
Source	Volume(cu. ft)	Flow Rate(scfm)	P(in. Hg)	<u>T(°F)</u>	of Op.
W-1615	24,251	4.1	-15.5	53	99
W-518-1913	0	0.0	0	0	0
W-518-1914	0	0.0	0	0	0
W-518-1915	11,238	1.9	-18.5	53	99
SVB-518-201	0	0.0	0	0	0
SVB-518-204	876	11.4	-10	72	1
Total:	36,365	17.4		10 1000 1000	

#### 4. Comments:

Facility secured 4-20-15 at 08:25 in preparation for Nitrogen Dissipation Tests utilizing W-1615, W-518-1915 and SVB-518-204, and proposed expansion wells W-2215A and W-2215B. Tests concluded 4-23-15, facility operation restarted at 15:45. Volumes extracted during tests are entered on this report.

5. I certify that the information in this report, to the best of my knowledge, is true and correct.

1. Reporting Period: Business Month May Week: 1 Year 2015

2. Dates (in **bold** and <u>underline</u>) treatment facility operated

April <u>25</u> <u>26</u> <u>27</u> <u>28</u> <u>29</u> <u>30</u> May

3. Wellfield Data:

	Weekly	Instantaneous			Hours
Source	Volume(cu. ft)	Flow Rate(scfm)	P(in. Hg)	<u>T(°F)</u>	of Op.
W-1615	37,252	3.7	-17	71	168
W-518-1913	0	0.0	0	0	0
W-518-1914	0	0.0	0	0	0
W-518-1915	18,122	1.8	-18	71	168
SVB-518-201	0	0.0	0	0	0
SVB-518-204	0	0.0	0	0	0
Total:	55,374	<u>5.5</u>			

4. Comments:

5. I certify that the information in this report, to the best of my knowledge, is true and correct.

- 1. Reporting Period: Business Month May Week: 2 Year 2015
- 2. Dates (in **bold** and <u>underline</u>) treatment facility operated

May <u>02 03 04 05 06 07 08</u>

3. Wellfield Data:

	Weekly	Instantaneous			Hours
Source	Volume(cu. ft)	Flow Rate(scfm)	P(in. Hg)	<u>T(°F)</u>	of Op.
W-1615	39,197	3.9	-16.5	63	168
W-518-1913	0	0.0	0	0	0
W-518-1914	0	0.0	0	0	0
W-518-1915	18,091	1.8	-18	63	168
SVB-518-201	0	0.0	0	0	0
SVB-518-204	0	0.0	0	0	0
Total:	57,288	5.7			

4. Comments:

. I certify that the information in this repor	t, to the best of my	knowledge, is true	e and correct
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- 1. Reporting Period: Business Month May Week: 3 Year 2015
- 2. Dates (in **bold** and <u>underline</u>) treatment facility operated

May <u>09 10 11 12 13 14 15</u>

#### 3. Wellfield Data:

	Weekly	Instantaneous			Hours
Source	Volume(cu. ft)	Flow Rate(scfm)	P(in. Hg)	T(°F)	of Op.
W-1615	41,060	4.1	-16	62	167
W-518-1913	0	0.0	0	0	0
W-518-1914	0	0.0	0	0	0
W-518-1915	18,026	1.8	-18	62	167
SVB-518-201	0	0.0	0	0	0
SVB-518-204	0	0.0	0	0	0
Total:	<u>59,086</u>	5.9			

4. Comments:

Quarterly vapor samples collected from idle and operating extraction wells 5-12-15.

5. I certify that the information in this report, to the best of my knowledge, is true and correct.

- 1. Reporting Period: Business Month May Week: 4 Year 2015
- 2. Dates (in bold and underline ) treatment facility operated

May <u>16</u> <u>17</u> <u>18</u> <u>19</u> <u>20</u> <u>21</u> <u>22</u>

3. Wellfield Data:

	Weekly	Instantaneous			Hours
Source	Volume(cu. ft)	Flow Rate(scfm)	P(in. Hg)	T(°F)	of Op.
W-1615	40,582	4.0	-16.3	62	169
W-518-1913	0	0.0	0	0	0
W-518-1914	0	0.0	0	0	0
W-518-1915	18,262	1.8	-18.2	62	169
SVB-518-201	0	0.0	0	0	0
SVB-518-204	0	0.0	0	0	0
Total:	58,844	5.8			

4. Comments:

5. I certify that the information in this report, to the best of my kn	nowledge, is true and correct.
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- 1. Reporting Period: Business Month May Week: 5 Year 2015
- 2. Dates (in **bold** and <u>underline</u>) treatment facility operated

May <u>23 24 25 26 27 28 29</u>

3. Wellfield Data:

	Weekly	Instantaneous			Hours
Source	Volume(cu. ft)	Flow Rate(scfm)	P(in. Hg)	<u>T(°F)</u>	of Op.
W-1615	40,298	4.0	-16	55	168
W-518-1913	0	0.0	0	0	0
W-518-1914	0	0.0	0	0	0
W-518-1915	19,142	1.9	-18	55	168
SVB-518-201	0	0.0	0	0	0
SVB-518-204	0	0.0	0	0	0
Total:	59,440	5.9			

4. Comments:

5. I certify that the information in this report, to the best of my knowledge, is true and correct.

1. Reporting Period: Business Month <u>June Week: 1</u> Year <u>2015</u>

2. Dates (in **bold** and <u>underline</u>) treatment facility operated

3. Wellfield Data:

	Weekly	Instantaneous			Hours
Source	Volume(cu. ft)	Flow Rate(scfm)	P(in. Hg)	<u>T(°F)</u>	of Op.
W-1615	39,031	3.9	-16.5	56	167
W-518-1913	0	0.0	0	0	0
W-518-1914	0	0.0	0	0	0
W-518-1915	18,014	1.8	-18	56	167
SVB-518-201	0	0.0	0	0	0
SVB-518-204	0	0.0	0	0	0
Total:	57,045	<u>5.7</u>			

4. Comments:

5. I certify that the information in	this report, to the best of my	knowledge, is true and correct
		0 ,

1. Reporting Period: Business Month <u>June Week: 2</u> Year <u>2015</u>

2. Dates (in **bold** and <u>underline</u>) treatment facility operated

June

<u>06</u> <u>07</u> <u>08</u> <u>09</u> <u>10</u> <u>11</u> <u>12</u>

3. Wellfield Data:

	Weekly	Instantaneous			Hours
Source	Volume(cu. ft)	Flow Rate(scfm)	P(in. Hg)	<u>T(°F)</u>	of Op.
W-1615	40,370	4.0	-16	67	168
W-518-1913	0	0.0	0	0	0
W-518-1914	0	0.0	0	0	0
W-518-1915	18,167	1.8	-18	67	168
SVB-518-201	0	0.0	0	0	0
SVB-518-204	0	0.0	0	0	0
Total:	58,537	<u>5.8</u>			

4. Comments:

5. I certify that the information in this report, to the best of my knowledge, is true and correct.

- 1. Reporting Period: Business Month <u>June Week: 3</u> Year <u>2015</u>
- 2. Dates (in **bold** and <u>underline</u>) treatment facility operated

June

<u>13</u> <u>14</u> <u>15</u> <u>16</u> <u>17</u> <u>18</u> <u>19</u>

3. Wellfield Data:

	Weekly	Instantaneous			Hours
Source	Volume(cu. ft)	Flow Rate(scfm)	P(in. Hg)	$T(^{o}F)$	of Op.
W-1615	39,335	3.9	-16.5	56	168
W-518-1913	0	0.0	0	0	0
W-518-1914	0	0.0	0	0	0
W-518-1915	19,163	1.9	-18.5	56	168
SVB-518-201	0	0.0	0	0	0
SVB-518-204	0	0.0	0	0	0
Total:	58,498	5.8			

4. Comments:

5. I certify that the information in this report, to the best of my knowledge, is true and correct.

- 1. Reporting Period: Business Month June Week: 4 Year 2015
- 2. Dates (in **bold** and <u>underline</u>) treatment facility operated

June

<u>20</u> <u>21</u> <u>22</u> <u>23</u> <u>24</u> <u>25</u> <u>26</u>

3. Wellfield Data:

	Weekly	Instantaneous			Hours
Source	Volume(cu. ft)	Flow Rate(scfm)	P(in. Hg)	<u>T(°F)</u>	of Op.
W-1615	38,288	3.8	-17	72	168
W-518-1913	0	0.0	0	0	0
W-518-1914	0	0.0	0	0	0
W-518-1915	18,136	1.8	-18	72	168
SVB-518-201	0	0.0	0	0	0
SVB-518-204	0	0.0	0	0	0
Total:	56,424	5.6			

4. Comments:

5. I certify that the information in this report, to the best of my knowledge, is true and correct.

am Thomas Date: 07-13-2015 Operator Signature:

1. Reporting Period: Business Month April Year 2015

2. Dates (in **bold** and underline ) treatment facility operated

April 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30

3. Wellfield Data:

	Monthly	Instantaneous		F	Hours
Source	Volume(cu. ft)	Flow Rate(scfm)	P(in. Hg)	<u>T(°F)</u> o	of Op.
W-1605	0	0.0	0	0	0
W-1608	0	0.0	0	0	0
W-2211	0	0.0	0	0	0
W-2212	0	0.0	0	0	0 '
SVI-ETS-504	0	0.0	0	0	0
W-ETS-507	0	0.0	0	0	0
W-2302	0	0.0	0	0	0
W-2303	0	0.0	0	0	0
Total:	<u>0</u>	0.0			

4. Discharge Information:

Discharge Location	Water Station	Volume
VTF5475 Vapor Injection Well	SVI-ETS-505	_0

Dagaiving

#### 5. Comments:

This treatment facility was shut down on 10-12-07 due to a FY2008 funding reduction. The facility will be restarted once a solution for mixed waste generation is implemented.

6. I certify that the information in this report, to the best of my knowledge, is true and correct.

1. Reporting Period: Business Month May Year 2015

2. Dates (in **bold** and <u>underline</u>) treatment facility operated

May 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29

3. Wellfield Data:

	Monthly	Instantaneous		F	lours
Source	Volume(cu. ft)	Flow Rate(scfm)	P(in. Hg)	Γ(°F) ο	of Op.
W-1605	0	0.0	0	0	0
W-1608	0	0.0	0	0	0
W-2211	0	0.0	0	0	0
W-2212	0	0.0	0	0	0
W-ETS-507	0	0.0	0	0	0
W-2302	0	0.0	0	0	0
W-2303	0	0.0	0	0	0
SVI-ETS-504	0	0.0	0	0	0
Total:	0	0.0			

4. Discharge Information:

	Receiving	
Discharge Location	Water Station	Volume
VTF5475 Vapor Injection Well	SVI-ETS-505	_0

#### 5. Comments:

This treatment facility was shut down on 10-12-07 due to a FY2008 funding reduction. The facility will be restarted once a solution for mixed waste generation is implemented.

6. I certify that the information in this report, to the best of my knowledge, is true and correct.

1. Reporting Period: Business Month June Year 2015

2. Dates (in **bold** and <u>underline</u>) treatment facility operated

May 30 31 June 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30

3. Wellfield Data:

	Monthly	Instantaneous		]	Hours
Source	Volume(cu. ft)	Flow Rate(scfm)	P(in. Hg)	<u>T(°F)</u> (	of Op.
W-1605	0	0.0	0	0	0
W-1608	0	0.0	0	0	0
W-2211	0	0.0	0	0	0
W-2212	0	0.0	0	0	0
SVI-ETS-504	0	0.0	0	0	0
W-ETS-507	0	0.0	0	0	0
W-2302	0	0.0	0	0	0
W-2303	0	0.0	0	0	0
Total:	0	0.0			<del></del>

4. Discharge Information:

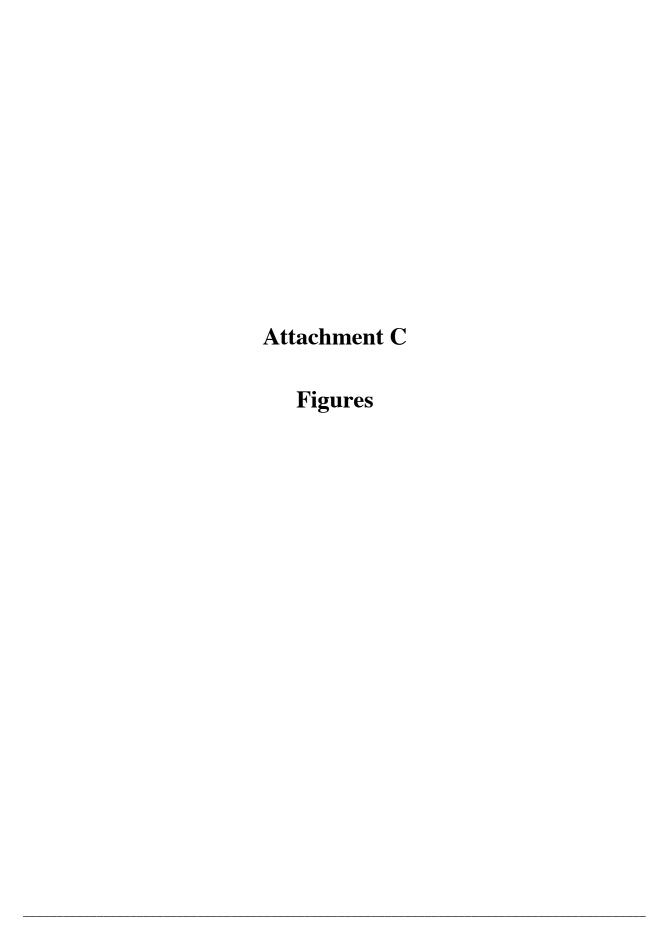
	Receiving	
Discharge Location	Water Station	Volume
VTF5475 Vapor Injection Well	SVI-ETS-505	0

Dagairring

5. Comments:

This treatment facility was shut down on 10-12-07 due to a FY2008 funding reduction. The facility will be restarted once a solution for mixed waste generation is implemented.

6. I certify that the information in this report, to the best of my knowledge, is true and correct.



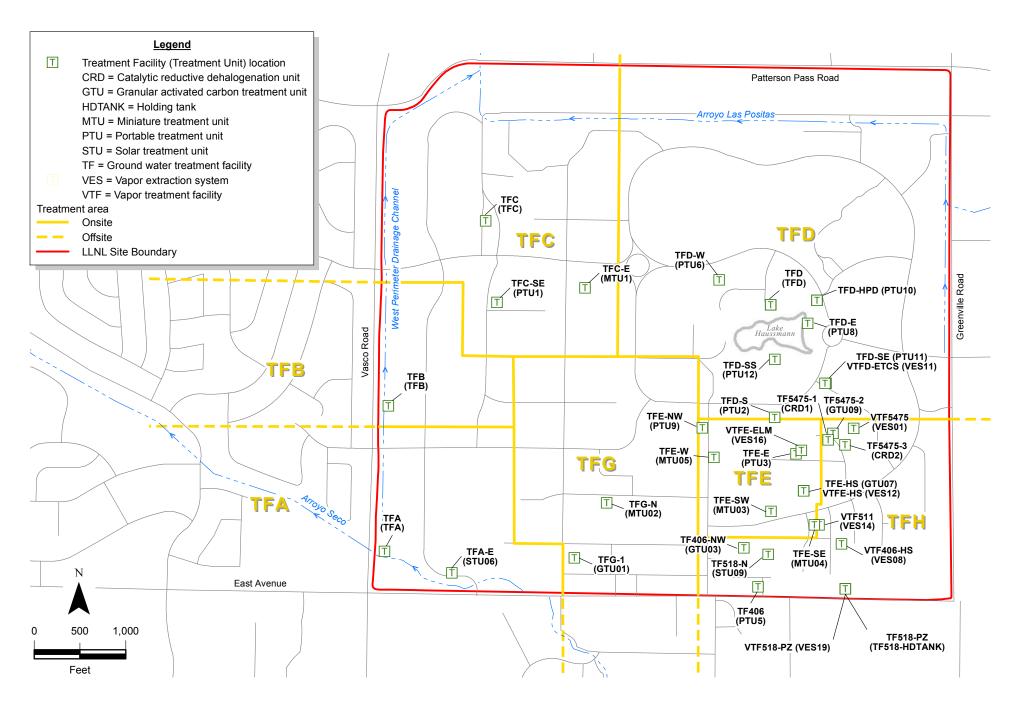


Figure 1. Livermore Site treatment areas and treatment facility locations.

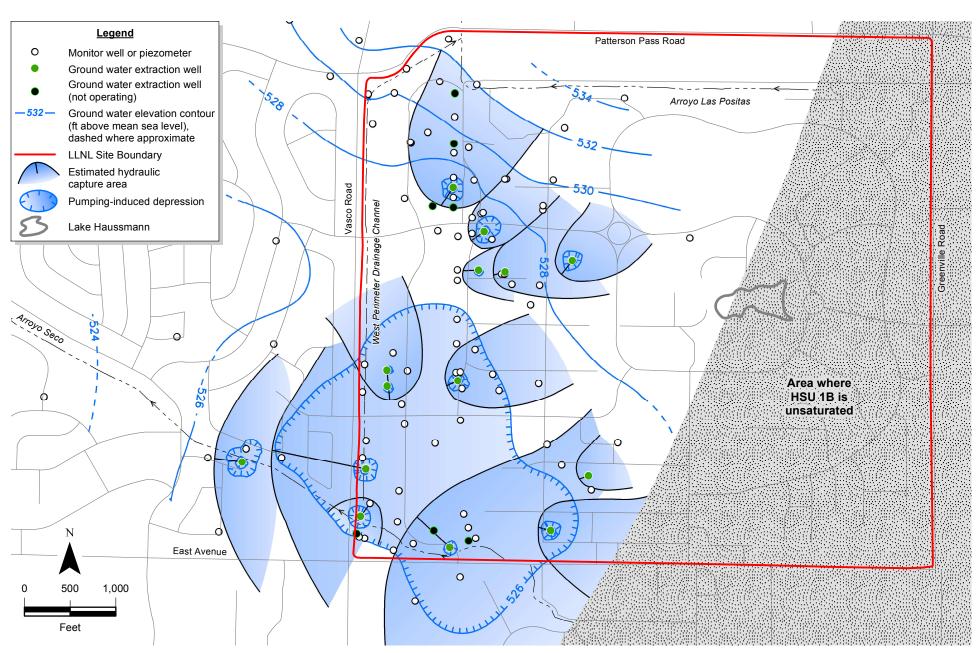


Figure 2. Ground water elevation contour map based on 107 wells completed within HSU-1B showing estimated hydraulic capture areas, LLNL and vicinity, second quarter 2015.

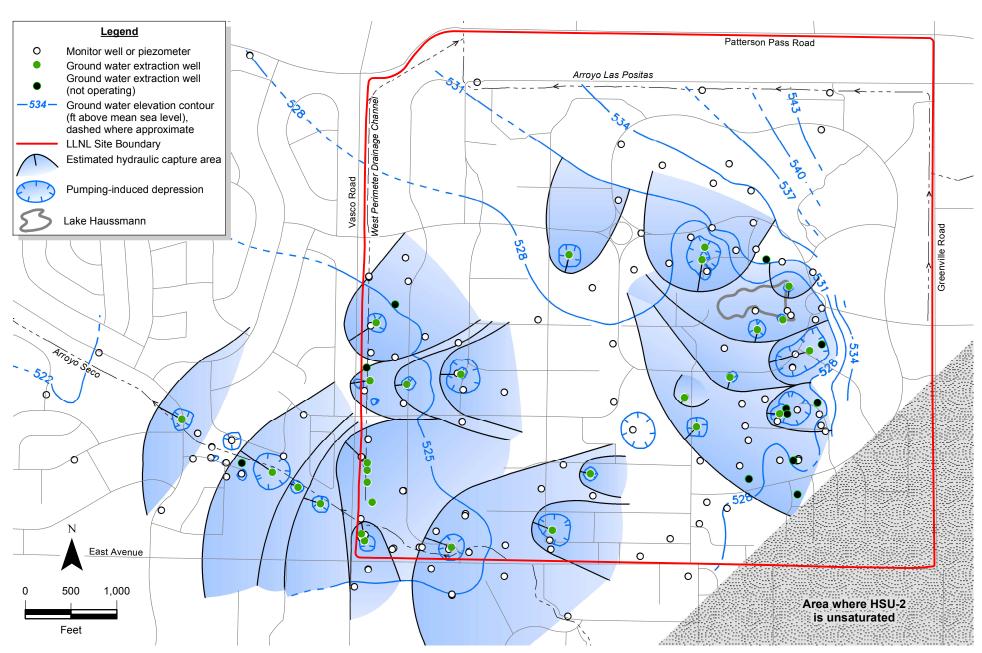


Figure 3. Ground water elevation contour map based on 159 wells completed within HSU-2 showing estimated hydraulic capture areas, LLNL and vicinity, second quarter 2015.

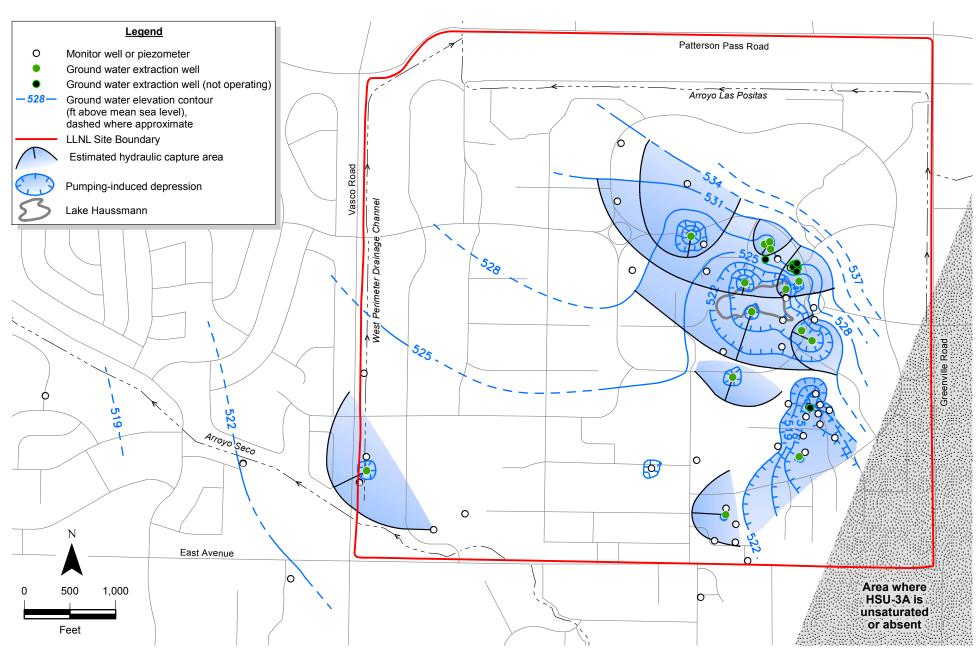


Figure 4. Ground water elevation contour map based on 70 wells completed within HSU-3A showing estimated hydraulic capture areas, LLNL and vicinity, second quarter 2015.

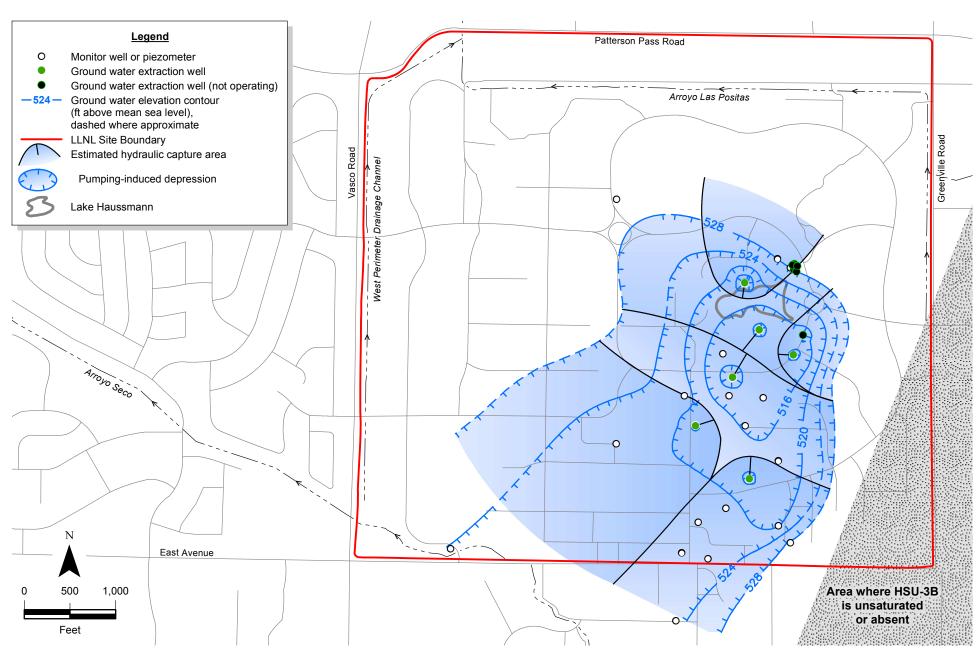


Figure 5. Ground water elevation contour map based on 31 wells completed within HSU-3B showing estimated hydraulic capture areas, LLNL and vicinity, second quarter 2015.

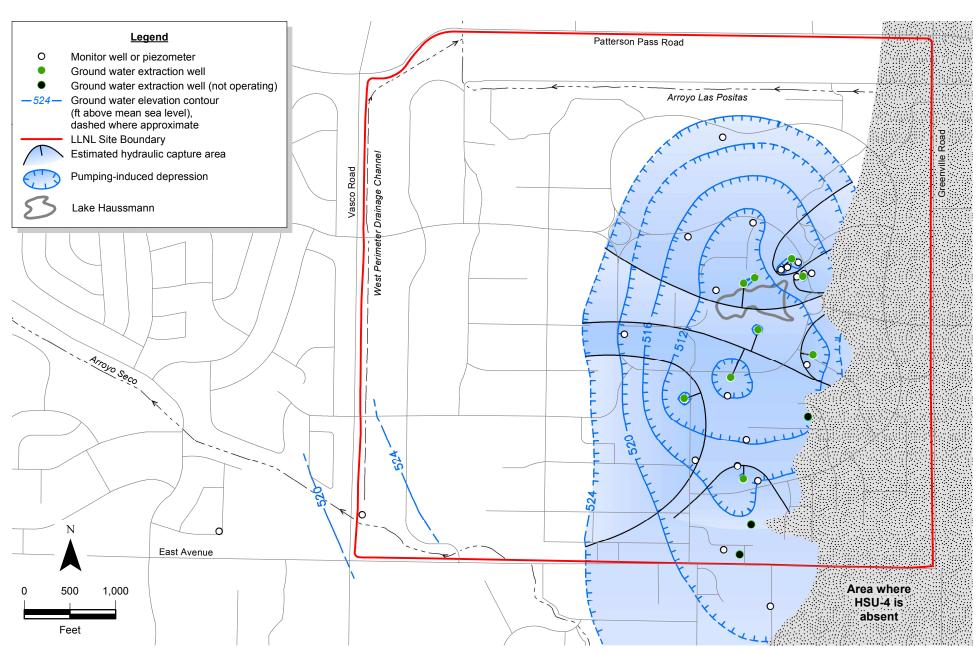


Figure 6. Ground water elevation contour map based on 33 wells completed within HSU-4 showing estimated hydraulic capture areas, LLNL and vicinity, second quarter 2015.

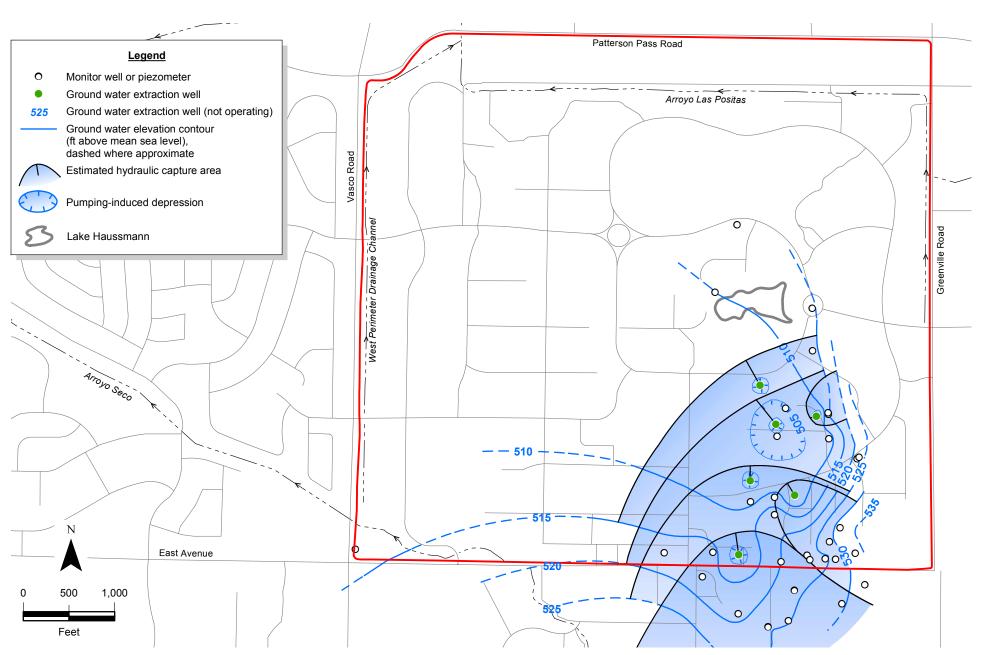


Figure 7. Ground water elevation contour map based on 39 wells completed within HSU-5 showing estimated hydraulic capture areas, LLNL and vicinity, second quarter 2015.